CHAPTER 1: PURPOSE AND NEED

1.1 INTRODUCTION

With publication of a Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS)[1] on December 14, 2012, the U.S. Army Corps of Engineers (Corps), Alaska District initiated the *National Environmental Policy Act* (NEPA) process for review of the Donlin Gold Project proposed by Donlin Gold, LLC (Donlin Gold) (Figure 1.1-1). The Corps is joined in this effort by several cooperating agencies with permitting authority or other special expertise. The cooperating agencies, consisting of five federal and state agencies and six tribal governments (Figure 1.1-2), provide recommendations to the Corps to ensure that this EIS provides a sound basis for agency decisions on permitting and other federal actions related to the proposed project. Development of the EIS begins with identifying the purpose and need for the project, found in this chapter.

Donlin Gold, LLC

- **Donlin Gold LLC is a 50/50 partnership**
  - Barrick Gold US
  - NovaGold Resources Alaska
- **Operates under agreements with *Alaska Native Claims Settlement Act* (ANCSA) landowners**
  - The Calista Corporation (Calista) – Mining Lease
  - The Kuskokwim Corporation (TKC) – Surface Use Agreement

Figure 1.1-1: Donlin Gold, LLC

Lead Agency: U.S. Army Corps of Engineers

Cooperating Agencies

Federal and State Agencies

- Bureau of Land Management (BLM)
- Pipeline and Hazardous Materials Safety Administration (PHMSA)
- U.S. Environmental Protection Agency (EPA)
- U.S. Fish and Wildlife Service (FWS)
- State of Alaska

Tribal Government

- Village of Crooked Creek
- Native Village of Napaimute
- Native Village of Chuathbaluk assisted by Center for Science and Public Participation
- Village of Aniak
- Knik Tribe
- Akiak Native Community) assisted by the Kuskokwim River Watershed Council

Figure 1.1-2: Lead and Cooperating Agencies

[1] Federal Register/Vol. 77, No. 241/Friday, December 14, 2012/Notices.

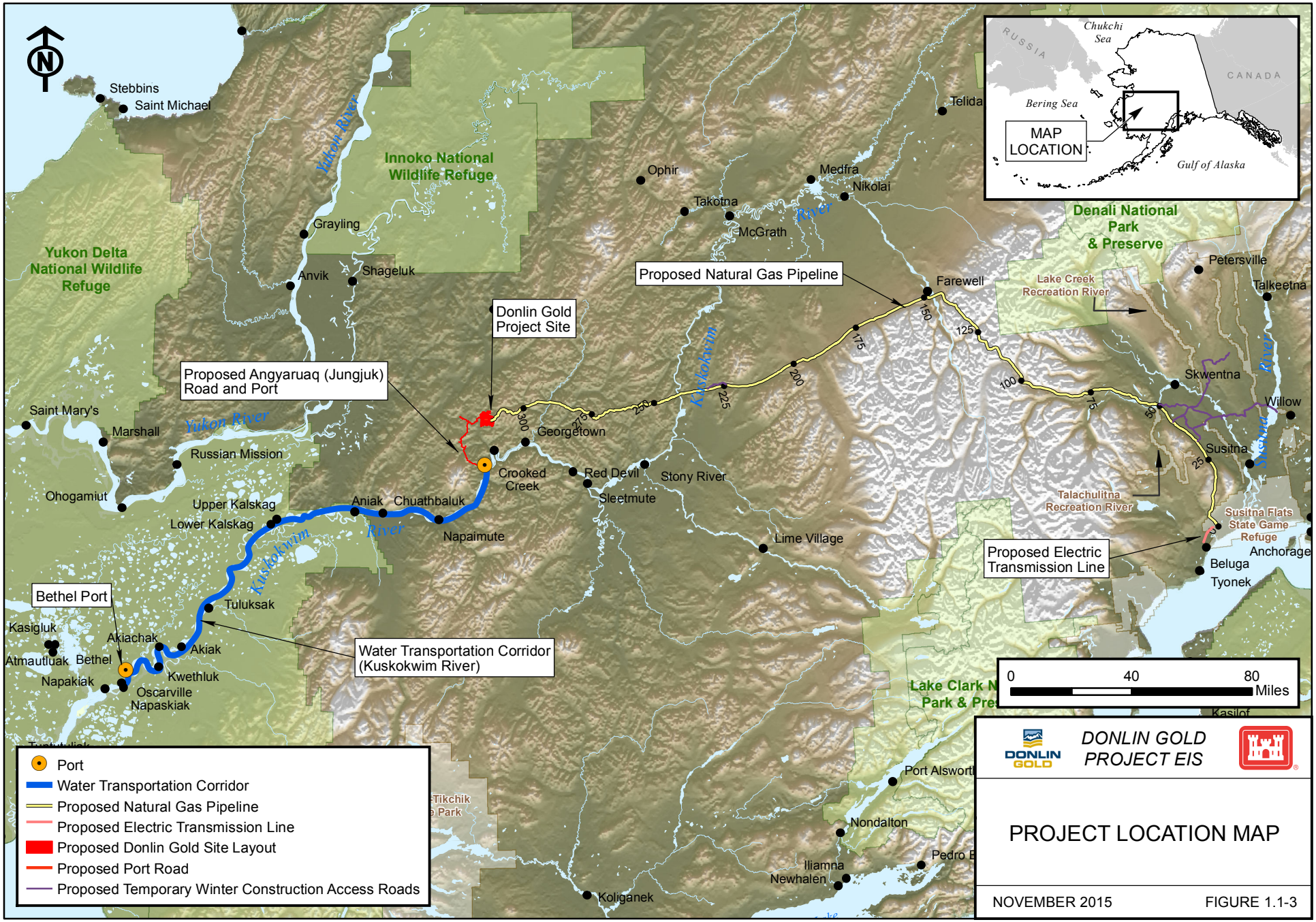
This EIS examines the following:

- Donlin Gold's plan to construct, operate, close, and reclaim a mine site, transportation facilities, and a gas pipeline, referred to as the proposed project (Figure 1.1-3 depicts the location of this proposed project).
- A range of alternatives including the No Action Alternative, consistent with applicable law, by which to accomplish the purpose and need of the proposed project may reasonably be accomplished while avoiding or minimizing adverse impacts.
- The existing environment that may be affected by this project.
- Potential impacts of construction, operations, and termination of the proposed project, including impacts of each of the alternatives.
- Mitigation measures that may be appropriate to avoid or minimize potential impacts.

1.1.1 ORGANIZATION OF THIS ENVIRONMENTAL IMPACT STATEMENT

Chapter 1 is organized to provide a brief overview of the proposed project and then address four key topics: 1) the project's purpose and need, 2) the responsibilities of the federal and state agencies and tribes in developing the EIS, 3) the relevant environmental issues drawn from public and agency comments during scoping, and 4) the applicable laws, executive orders, and permit requirements with which the project must comply to move forward.

Subsequent chapters build on the purpose and need for the project. Chapter 2 focuses on alternatives. It explains the process used to consider and develop alternatives, including how input from scoping fit into the development of alternatives. Chapter 3 describes the affected environment and analyzes environmental consequences of the proposed project and alternatives. This chapter is organized to combine discussion of the affected environment and the environmental consequences so that the reader can more easily see the relation between the baseline environmental conditions and potential effects of the proposed project and alternatives on each resource, such as air quality, fish populations, or community health. Chapter 4 analyzes the cumulative effects of the proposed project and alternatives. Chapter 5 documents impact reducing design features, Best Management Practices (BMPs), and standard permit conditions, as well as proposed mitigating measures to modify the proposed project design, alternatives, or operations to reduce harmful effects to the natural and human environment. Chapter 6 details the coordination and consultation efforts for this EIS. This chapter elaborates on the tribal consultation (Section 1.6) and scoping and public outreach efforts (Section 1.7) described in Chapter 1. Chapters 7, 8, and 9 list the preparers of this document, discuss distribution, and provide reference material. Finally, the Appendices contain details supporting the findings presented in a chapter, but are not essential to understanding the findings.


Stebbins
Saint Michael
Yukon River
Innoko National Wildlife Refuge
Grayling
Yukon Delta National Wildlife Refuge
Anvik
Shageluk
Ophir
Medfra
Nikolai
Takotna
McGrath
Telida
Denali National Park & Preserve
Petersville
Talkeetna
Lake Creek Recreation River
Farewell
Proposed Natural Gas Pipeline
Donlin Gold Project Site
Proposed Angyaruaq (Jungjuk) Road and Port
Kuskokwim River
Skwentna
Willow
Susitna River
Saint Mary's
Marshall
Yukon River
Russian Mission
Georgetown
Crooked Creek
Red Devil
Stony River
Sleetmute
Ohogamiut
Upper Kalskag
Lower Kalskag
Aniak
Chuathbaluk
Napaimute
Lime Village
Susitna
Talachulitna Recreation River
Susitna Flats State Game Refuge
Anchorage
Beluga
Tyonek
Proposed Electric Transmission Line
Bethel Port
Tuluksak
Kasigluk
Akiachak
Akiak
Atmautluak
Bethel
Kwethluk
Napakiak
Oscarville
Napaskiak
Water Transportation Corridor (Kuskokwim River)
Lake Clark National Park & Preserve
Kasilof
Port Alsworth
Nondalton
Iliamna
Newhalen
Pedro Bay
Koliganek
Tikchik State Park
MAP LOCATION
Chukchi Sea
RUSSIA
CANADA
Bering Sea
Gulf of Alaska
0
40
80
Miles
Port
Water Transportation Corridor
Proposed Natural Gas Pipeline
Proposed Electric Transmission Line
Proposed Donlin Gold Site Layout
Proposed Port Road
Proposed Temporary Winter Construction Access Roads
DONLIN GOLD
DONLIN GOLD PROJECT EIS
PROJECT LOCATION MAP
NOVEMBER 2015
FIGURE 1.1-3

1.1.2 CLEAN WATER ACT, RIVERS AND HARBORS ACT, MINERALS LEASING ACT, AND NEPA

After receiving a permit application in July 2012 from Donlin Gold, under the Corps' jurisdictional authority pursuant to Section 10 of the *Rivers and Harbors Act* of 1899 (RHA) [33 U.S. Code (USC) 403] and Section 404 of the *Clean Water Act* (CWA) [33 USC 1344], the Corps initiated the NEPA process and became the lead federal agency. Under Section 404 of the CWA, the Corps has authority to issue or deny permits for placement of dredged or fill material in waters of the United States, including wetlands. Under Section 10 of the RHA, the Corps has authority to issue or deny permits for work and structures in, on, over, or under navigable waters of the United States.

For projects requiring either of these Corps permits, 33 Code of Federal Regulations (CFR), Part 325, Appendix B, paragraph 7.b(1) directs Corps personnel to include within the NEPA scope of analysis the "specific activity requiring a (Corps) permit and those portions of the entire project over which the Government has sufficient control and responsibility to warrant federal review." Factors to be considered in determining whether sufficient "control and responsibility" exist are found in 33 CFR, Part 325, Appendix B, paragraph 7.b(2). Based on these factors, the Corps' NEPA scope of analysis extends to the entire proposed project.

Donlin Gold filed a Right-of-way (ROW) application with the BLM consistent with the requirements of Section 28 of the *Mineral Leasing Act* of 1920 (MLA) as amended for the proposed project across federal lands. Donlin Gold also intends to file an application with the PHMSA for a Special Permit to allow use of a strain based design (SBD) for all or parts of the pipeline instead of building the pipeline to existing federal code. To avoid duplication of efforts and so that one NEPA document can be used to inform all of the decisions needed to determine whether and how the proposed action should proceed, pursuant to 40 CFR 1501.6 the Corps invited, and the BLM and PHMSA formally agreed, to participate in the Donlin Gold Project EIS process as cooperating agencies rather than undertaking a separate NEPA evaluation for their decisions on the pipeline.

The National Environmental Policy Act (NEPA) of 1969 is our basic national charter for protection of the environment. NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. Most important, NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail. Ultimately, of course, it is not better documents but better decisions that count. NEPA's purpose is not to generate paperwork—even excellent paperwork—but to foster excellent action. The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment (40 CFR §1500.1).

1.1.2.1 THE THREE STAGES OF THE CORPS' DEVELOPMENT AND EVALUATION OF THE PROJECT PURPOSE AND NEED UNDER NEPA AND THE CWA

In accordance with NEPA, an EIS "shall briefly specify the underlying purpose and need to which the agency is responding" (40 CFR 1502.13). When considered together, the "purpose" and the "need" for the project establish the basic parameters for developing the range of alternatives to be considered in an EIS.

In addition to NEPA requirements, the Corps regulations (33 CFR Part 325) for implementation of the CWA[2] specify three stages of examining the underlying goals and developing the purpose of a project:

1. The NEPA purpose and need (found in Section 1.3.3 below) is developed from the applicant's stated purpose and need (Section 1.3.2)[3];
2. A "basic" purpose defined by the Corps specifically for addressing a project's water dependency (Section 1.3.4.1.1); and
3. An "overall" purpose (Section 1.3.4.1.2) which is defined by the Corps and also takes into account the applicant's stated purpose and need and is used for the alternatives analysis.

The text below and Figure 1.2-1 describe and illustrate the relationships among the three components used to develop the purpose and need statements.

Three stages in the Corps' development and examination of a project's purpose and determination of whether or not a project is "Water Dependent"

Interpreting the Applicant's Stated Purpose and Need: The applicant's stated purpose and need is an expression, typically in the applicant's own words, of the underlying goals for a proposed project. The Corps takes an applicant's purpose and need into account when determining the Corps' purpose and need for the NEPA analysis and the overall purpose for evaluating practicable alternatives under the Section 404(b)(1) Guidelines. The applicant's purpose and need is described in Section 1.3.2 of this chapter.

Defining the Corps' Basic Project Purpose and Water Dependency: The Corps uses the basic project purpose to determine water dependency [40 CFR 230.10(a)(3)]. If a project is not water dependent, other alternatives that would not result in impacts to special aquatic sites are presumed to be available. Section 1.3.4.1.1 defines the Corps' basic project purpose and water dependency as applied to the applicant's proposed project.

The Section 404(b)(1) Guidelines are one of the substantive criteria that the Corps uses to evaluate a permit application. The Section 404(b)(1) Guidelines establish two rebuttable presumptions for non-water dependent projects: first, the Guidelines presume that less

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[2] 33 CFR Part 325 Appendix B "NEPA Implementation Procedures for the Regulatory Program;" 40 CFR 230.10(a).
[3] The regulations further state that: "Also while generally focusing on the Applicant's statement, the Corps, will in all cases exercise independent judgment in defining the purpose and need for the project from both the Applicant's and the public's perspective [33 CFR Part 325 Appendix B 9.b.(4)]."

damaging alternatives exist, which do not require discharge into a special aquatic site. Second, the Guidelines presume that "upland" alternatives result in less environmental loss than wetland alternatives.

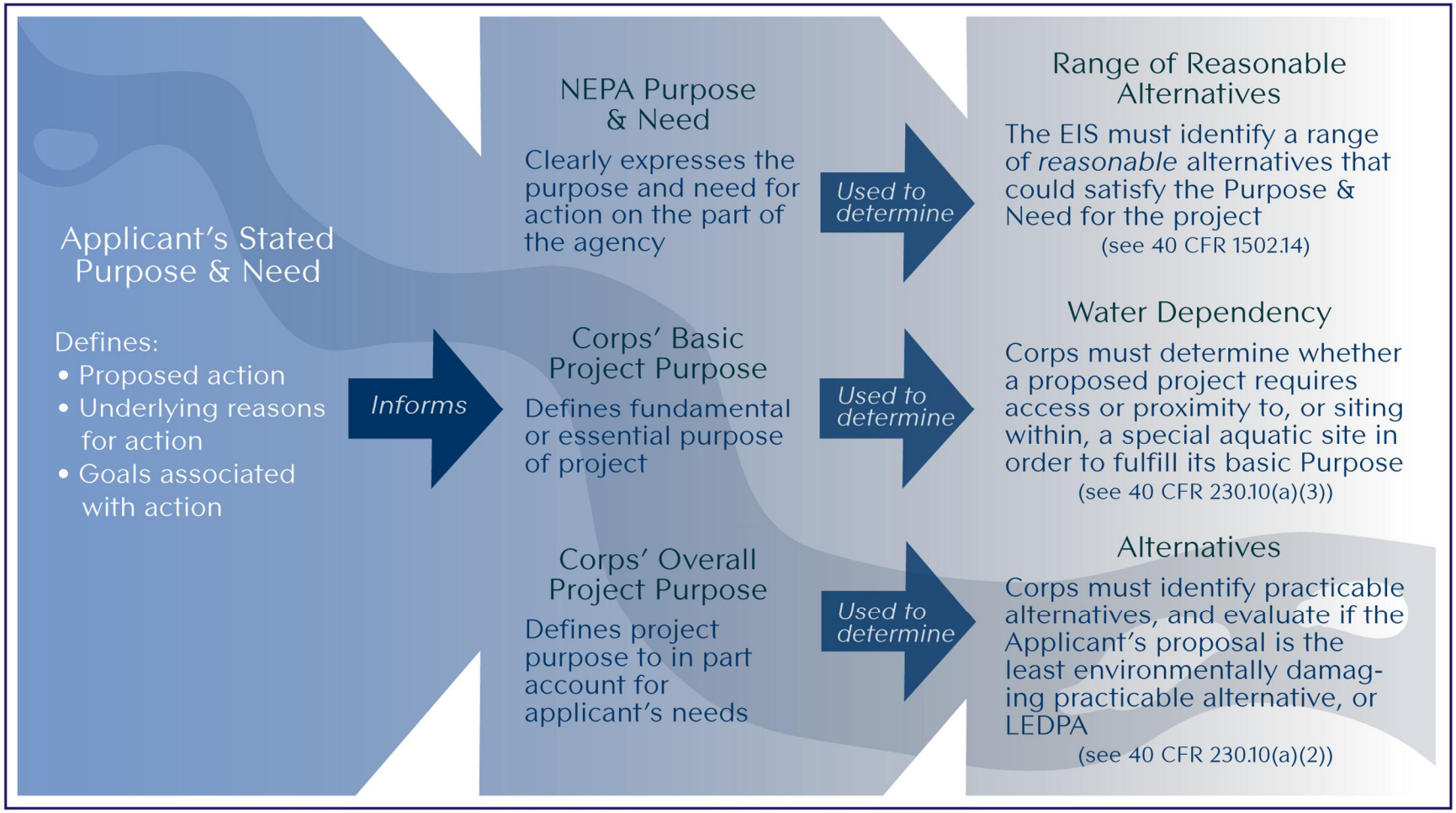
Defining the Corps' Overall Project Purpose: The Corps uses the overall project purpose to define alternatives for evaluation in an EIS and to determine if the applicant's proposed project is the least environmentally damaging practicable alternative (LEDPA) under the Section 404(b)(1) Guidelines. According to Corps guidance in its 2009 Standard Operating Procedures, "The overall project purpose should be specific enough to define the applicant's needs, but not so restrictive as to constrain the range of alternatives that must be considered under the Section 404(b)(1) Guidelines. Defining the overall project purpose is the Corps' responsibility. However, the applicant's needs and the type of project being proposed should be considered." The Corps' overall project purpose more specifically addresses the applicant's purpose and need than does the Corps' basic project purpose. The Corps' overall project purpose, as applied to the applicant's proposed project, is defined in Section 1.3.4.1.2.

1.2 PROJECT DESCRIPTION

Donlin Gold is proposing a project to produce gold from ore reserves owned by Calista through open pit mining methods and milling processes suitable for application in remote western Alaska. To mine these ore reserves, Donlin Gold is proposing the development of an open pit, hardrock gold mine located in the Kuskokwim River watershed, 277 miles west of Anchorage, 145 miles northeast of Bethel, and 10 miles north of the community of Crooked Creek. The proposed project would require approximately 3 to 4 years to construct with a projected mine life of approximately 28 years.

Major project components include the mine site; transportation facilities; and the natural gas pipeline:

- The Mine Site Infrastructure and Processes component includes the excavation of an open pit, milling and ore processing, tailings storage facility (TSF), waste rock facility (WRF) and overburden stockpile, dual-fuel (diesel and natural gas) 227 MW power plant, utilities, services and infrastructure, mine maintenance and safety controls, and mine site closure and reclamation.
- The Transportation Facilities component includes expanded port facilities at the Bethel cargo terminal, river barge traffic, barge landing at Angyaruaq (Jungjuk), 30-mile mine access road, 5,000-foot airstrip, transportation facilities, and closure and reclamation of the Transportation Facilities.



Source: Corps 2012.

Figure 1.2-1: The Role of Purpose and Need in the EIS Analysis

- A 315-mile, small-diameter (14-inch), natural gas pipeline from the west side of Cook Inlet to the mine site would provide energy for the power plant at the mine site. The Natural Gas Pipeline component includes a ROW, aboveground facilities (compressor station, pig launcher and receiver station, and main line valves), temporary work areas outside of the ROW, design and construction procedures, and decommissioning and abandonment.

The proposed mine would deliver about 59,000 short tons[4] per day of ore for approximately 28 years to supply an onsite mill, which would produce approximately one million ounces of gold per year through crushing and grinding, flotation, pressure oxidation and cyanide leaching of the concentrate, and stripping, electrowinning, and refining. The proposed mine and related facilities would have a total footprint of approximately 16,300 acres. Figure 1.3-1 provides additional summary information.

1.3 PROJECT PURPOSE AND NEED

1.3.1 DEVELOPMENT OF THE PURPOSE AND NEED

The NEPA guidelines for Environmental Impact Statements (40 CFR Part 1502) direct that "The [purpose and need] statement shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action."

The NEPA purpose and need statement is developed through consideration of the purpose and need stated by the applicant, Donlin Gold. The Corps is neither a proponent for nor an opponent of Donlin Gold's proposed project. The same is generally true for the cooperating agencies. Also, while generally focusing on the applicant's statement, the Corps will, in all cases, exercise independent judgment in defining purpose and need for the project from both the applicant's and the public's perspective [33 CFR, Part 325 Appendix B.9.b.(4)].

Project Summary

- **Reserve:** >33 million ounces of gold (~500M tons ore)
- **Mine Life:** ~28 years
- **Production:** >1 million ounces annually
- **Operations:** Open pit, conventional
- **Milling:** 59,000 tons/day, sulfide flotation. Pressure Oxidation. Carbon-in-Leach (CIL) recovery
- **Strip ratio:** ~5.5:1 = ~3 billion tons waste rock
- **Tailings:** Fully lined storage facility
- **Power:** ~227 MW onsite gas-fired power plant, supplied by a 315-mile, 14" buried natural gas pipeline
- **Logistics:** Most consumables supplied by Kuskokwim River transportation system with port near Jungjuk Creek

Figure 1.3-1: Donlin Gold Project Summary

[4] The term "short tons" refers to the English measurement of 2,000 pounds.

1.3.2 APPLICANT'S STATED PURPOSE AND NEED

Donlin Gold supplied the following statement to describe its overall purpose and need for this project:

> The purpose of the proposed project is to profitably produce gold from ore reserves owned by Calista, an ANCSA corporation, utilizing open pit mining methods and conventional, proven milling processes suitable for application in remote western Alaska. The need for the proposed project is to enable Calista and TKC to maximize economic benefits for their shareholders, from lands with mineral potential selected and conveyed to them under ANCSA, by producing gold to meet worldwide demand. Gold is an established commodity with international markets.

Donlin Gold also supplied the following statement to describe the purpose and need for the gas pipeline component of this project:

> The purpose of the Donlin Gold natural gas pipeline component is to provide a long-term stable supply of natural gas to meet energy needs for the proposed Donlin Gold Project. The proposed pipeline is designed as a privately-owned facility to support the proposed mine operation. Natural gas supplied by the pipeline would be used to create electricity for mine operations and heat for buildings. Donlin Gold has determined that the use of natural gas supplied via the proposed pipeline is the most practicable, cost-effective, and environmentally acceptable means of providing a reliable long-term energy source for the proposed project.
>
> Donlin Gold's need for the pipeline is driven by the remote location of the mine site. There are no existing or readily useable resources that can provide sufficient energy needed for development and operation of the mine within Donlin Gold's timeframe. The remote location does not have sufficient, naturally occurring gas resources, or other energy sources of the magnitude necessary to support mine development and operations. No existing transportation or utility infrastructure services are available to the proposed mine site or surrounding area. Access to the mine site is seasonal via the Kuskokwim River or by aircraft, as weather conditions allow.

1.3.3 NEPA PURPOSE AND NEED

The Corps' determination of the NEPA purpose is to produce gold from ore reserves from the Donlin deposit using mining processes, infrastructure, logistics, and an energy supply(s) that are economic and feasible for application in remote western Alaska. The need for the project is to provide economic benefits to Donlin Gold, Calista, and TKC shareholders; produce gold to meet worldwide demand; and provide local economic development.

1.3.4 AGENCY SPECIFIC STATEMENTS OF PURPOSE AND NEED

Because more than one federal agency will rely on this EIS, their codified implementation guidance also must be followed. Therefore, the following are statements of purpose and need specific to each of those federal agencies.

1.3.4.1 THE CORPS' PROJECT PURPOSE

1.3.4.1.1 BASIC PROJECT PURPOSE AND WATER DEPENDENCY

The basic project purpose is to produce gold from ore reserves. In general, the production of gold from these ore reserves is determined by the Corps not to be a water dependent activity, i.e., the project does not require siting within a "special aquatic site"[5] to fulfill its basic purpose.

Donlin Gold is proposing to construct an Angyaruaq (Jungjuk) port facility and to use barges to transport fuel and supplies. Additionally, the proposed natural gas pipeline would cross wetlands, and there are wetlands that overlie the ore body, which are considered under regulation to be "special aquatic sites." The determination that this project is not water dependent means that the Corps presumes that there are upland alternatives and/or less environmentally damaging practicable[6] alternatives to Donlin Gold's proposed project. Chapter 2 of this EIS documents the development of alternatives. The Corps may authorize activities (such as the filling of wetlands) that are not water dependent if an applicant can show that alternative upland locations are not available or not practicable, that the activity is in compliance with other Section 404(b)(1) Guideline requirements, that the action is not contrary to the public interest, and that all other applicable regulatory requirements are met (Corps 2009)[7].

1.3.4.1.2 OVERALL PROJECT PURPOSE

The overall purpose of the Donlin Gold Project as defined by the Corps, is to produce gold from the Donlin deposit ore reserves using mining processes, infrastructure, logistics, and an energy supply(s) practicable for application in remote western Alaska, while maximizing economic benefits for Donlin Gold, Calista, and TKC.

The overall project purpose allows for a robust consideration of alternatives consistent with a non-water dependent project's basic purpose while providing a foundation to determine practicability. An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project purposes [40 CFR 230.10(a)(2)].

1.3.4.2 BLM PROJECT PURPOSE AND NEED

The BLM addresses the purpose and need for the project based on its regulations. The BLM must also address conformance with the applicable land use management plans. The following sections address these two components of the BLM purpose and need.

1.3.4.2.1 BLM PURPOSE AND NEED FOR ACTION

The BLM action under consideration is a ROW Grant for a gas pipeline, including associated Temporary Use Permits, under the MLA of 1920, as amended (30 USC 185). The need to

[5] "Special aquatic sites" as described in 40 CFR Part 230, Subpart E include wetlands, sanctuaries and refuges, mud flats, vegetated shallows, coral reefs, riffle and pool complexes.
[6] An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes (40 CFR 230.10(a)(2))
[7] U.S. Army Corps of Engineers 2009. Standard Operating Procedures for the U.S. Army Corps of Engineers' Regulatory Program.

evaluate Donlin Gold's proposal is established by BLM's responsibility under the MLA to respond to requests to transport oil or gas across public lands via pipeline. Consistent with 43 CFR 2881.2, the BLM's objective or purpose in considering this action is to provide legal access across public lands in a manner that: protects the natural resources associated with federal and adjacent lands, whether private or administered by a government entity; prevents unnecessary and undue degradation to public lands; promotes the use of ROW in common (where applicable); and coordinates, to the fullest extent possible, with state and local governments, interested individuals, and appropriate quasi-public entities.

The BLM decision to be made is whether to authorize the requested ROW Grant and associated Temporary Use Permits and, if authorized, what terms and conditions would apply to the authorizations.

1.3.4.2.2 CONFORMANCE WITH BLM LAND USE PLANS

In addition to the agency-specific guidance regarding purpose and need, the BLM must also evaluate the proposed project for conformance with two land use plans. The *Ring of Fire Record of Decision and Approved Management Plan* of March 2008 (RMP), and the *Southwest Planning Area, Management Framework Plan* of November 1981 (MFP) provide the overall long-term management direction for BLM-managed lands encompassed by the proposed Donlin project. The requested pipeline ROW authorization is consistent with the following decisions in the RMP and MFP, respectively:

Ring of Fire Record of Decision and Approved Management Plan, March 2008

I. Lands and Realty

I-1: Goal

2. Provide a balance between land use (ROW, permits, leases and sales) and resource protection which best serves the public at large.

I-2: Management Action

I-2n: Rights-of-Way

The BLM may issue ROW for a variety of uses including but not limited to: roads, water pipelines, electric lines, and communication sites under the authority of Title V of *Federal Land Policy and Management Act* of 1976 (FLPMA). Oil and gas pipelines are issued using the MLA (1920).

[At a minimum, the following stipulations] developed during the proposal's evaluation will include:

- Restoration, revegetation and curtailment of erosion along the ROW route.
- Compliance with air and water quality standards.
- Control or prevention of damage to the environment, public and private property, and hazards to public health and safety.
- Protection of subsistence resources and the user's access to those resources.
- Protection of the natural resources associated with public lands.

- Utilization of ROW in common with respect to engineering and technological compatibility will be promoted.
- Coordination with the State and Local governments [capitalized in the original], tribal entities, and interested groups and individuals takes place to the fullest extent possible.

Southwest Planning Area, Management Framework Plan, November 1981

Lands, L-1.2 - Multiple-Use Recommendation

Allow ROW grants throughout the Planning Area on a case-by-case basis.

1.3.5 PIPELINE HAZARDOUS MATERIAL SAFETY ADMINISTATION PURPOSE AND NEED

Donlin Gold is proposing to build a pipeline to transport natural gas to the mine site. The U.S. Department of Transportation (USDOT), PHMSA is the regulating agency and 49 CFR Part 192 includes specific requirements for the design, construction, and operation of natural gas pipelines. Donlin Gold anticipates there will be areas along the pipeline with potentially frost unstable soils or ground movement, and intends to request a Special Permit from PHMSA to allow Strain-Based Design of the pipeline. Strain-Based Design involves advanced metallurgy and engineering to allow the pipe to deform in the longitudinal direction and yet remain safe. Special Permits are allowed by pipeline regulations in 49 CFR 190.341. PHMSA is required to comply with NEPA in deciding whether to issue the permit.

A Special Permit would allow Donlin Gold to design and construct the pipeline using Strain-Based Design. The Special Permit would include stipulations to ensure the pipeline has equal or greater safety than a pipeline constructed to code (49 CFR Part 192).

The PHMSA decision to be made is whether to authorize a Special Permit for the project if one is requested by Donlin Gold and, if authorized, what terms and conditions would apply to the permit. The need to evaluate Donlin Gold's request for a Special Permit, should the request be made, is established by PHMSA's responsibility under Title 49, USC Chapter 601 to prescribe minimum safety standards for pipeline transportation and for pipeline facilities. Consistent with 49 CFR 190.341, PHMSA's objective or purpose in considering this action is to provide for alternative requirements, or variances, to the design, construction, operation, and maintenance of a pipeline where such variances would result in a pipeline with equal or greater safety than a pipeline constructed in accordance with 49 CFR Part 192.

1.4 LEAD AND COOPERATING AGENCY ROLES

NEPA sets policy to guide the federal government, including the lead agency and the cooperating agencies, in examining major federal actions that may have significant effects on the human environment including the physical, biological, and social environments. The Corps is the lead federal agency for this EIS. Cooperating agencies are shown in Figure 1.1-2. Cooperating agencies have jurisdiction over some part of the project by law, or have special expertise in regard to a potential environmental impact to be addressed in this EIS. Cooperating Tribes also bring traditional ecological knowledge (TEK) and wisdom regarding the lands and resources they traditionally use, including the potential environmental consequences of the proposed project. The responsibilities of cooperating agencies include assisting the Corps in identifying agency-specific regulatory requirements, issues for analysis in the EIS, and relevant

sources of data. The cooperating agencies meet regularly to provide comments on proposed strategies for each EIS milestone, as well as providing review comments on draft technical documents and chapters of the EIS.

1.4.1 THE U.S. ARMY CORPS OF ENGINEERS

As the lead agency for this proposed project, the Corps is responsible for the overall direction in developing the EIS, as well as issuing or denying the necessary permits within its jurisdiction. The Corps decisions to be made are centered on the following permits:

- Under Section 10 of the RHA (33 USC 403), the Corps requires prior approval for any work performed or structures constructed in, on, over, or under navigable waters of the U.S., or which affect the course, locations, condition or capacity of such waters.
- Under Section 404 of the CWA (33 USC 1251 et seq.), the Corps regulates the discharge of dredged or fill material in waters of the United States, including wetlands.

The Corps initiated the NEPA process as part of its permit review process. The Corps bears responsibility for conducting the scoping meetings, evaluating comments received during scoping, and ensuring these comments are addressed in the Draft EIS. Following release of the Draft EIS, the Corps will conduct public meetings to receive comments on the Draft EIS and ensure that these are addressed in development of the Final EIS. As part of its permit review, the Corps will issue a public notice of the permit application, and evaluate comments received on the permit notice and on both the Draft and Final EIS. The Corps will prepare a Record of Decision (ROD) which describes in detail the Corps' evaluation of the permit application and states whether the permit is granted, denied, or if an alternative to the proposed action is selected. If the permit is granted, the ROD will also include any conditions attached to the Corps' approval.

As part of the review and consideration of Donlin Gold's permit application, the Corps will be required to consider the following in addition to the Final EIS:

1. Compliance with the Section 404(b)(1) Guidelines, which are the criteria used to evaluate discharges of dredged or fill material into waters of the United States, including jurisdictional wetlands, under Section 404 of the CWA. A fundamental principle of the Section 404(b)(1) Guidelines is that dredged or fill material should not be discharged into wetlands and other waters unless it can be demonstrated that the discharge will not have unacceptable adverse impacts on those waters.

   The Section 404(b)(1) Guidelines also require the following determinations: 1) the project is the Least Environmentally Damaging Practicable Alternative (LEDPA), 2) the project will not cause or contribute to the violation of applicable state or federal laws, such as water quality standards or the *Endangered Species Act* (ESA), 3) the project will not result in significant degradation of waters of the United States, and 4) appropriate and practicable steps have been taken to minimize the adverse impacts of the project on wetlands and other waters.

2. The Public Interest Review is the main framework for the overall evaluation of projects. The public interest review requires the careful weighing of all public interest factors relevant to each particular permit application. Thus, one specific factor (e.g., fish and wildlife values or economics) typically cannot by itself force a

specific decision, but rather the decision represents the net effect of balancing all public interest factors, many of which are frequently in conflict.

3. Compliance with relevant federal laws and regulations such as the ESA, the *Marine Mammal Protection Act* (MMPA), and the *National Historic Preservation Act* (NHPA).

1.4.2 BUREAU OF LAND MANAGEMENT

On March 2, 2010, Donlin Gold submitted an initial application to the BLM Anchorage Field Office for a pipeline ROW permit to cross public lands pursuant to Section 28 of the *Mineral Leasing Act* of 1920 (30 USC 185) and 43 CFR Part 2880, *Rights of Way Under the Mineral Leasing Act*. The application was subsequently updated as the Donlin Gold Natural Gas Pipeline Plan of Development was developed and revised. In January 2014, Donlin Gold submitted an additional application for the proposed fiber optic cable associated with the proposed pipeline.

Under Section 28 of the MLA (30 USC 185), the BLM has the authority to issue grants for oil or gas pipelines or related facilities to cross federal lands under BLM jurisdiction or under the jurisdiction of two or more federal agencies, except land in the National Park System, land held in trust for Indians, or land within the Outer Continental Shelf.

Additionally, pursuant to the *National Trails Systems Act* of 1968 (16 USC 1241-1251), the BLM is the statutorily designated federal administrator for the Iditarod National Historic Trail (INHT), and is the federal point-of-contact for INHT matters. No one entity manages the entire Iditarod Trail—management is guided by a cooperative plan adopted by federal and state agencies in the mid-1980s. The BLM, as INHT administrator, coordinates the efforts of public land managers and volunteers on behalf of the trail.

Prior to issuing a decision on the requested ROW, the BLM must review the proposed ROW action pursuant to NEPA and other applicable federal laws and regulations, including the ESA and the NHPA. The pipeline ROW would not be necessary *but for* the construction and development of the proposed open pit gold mine. As a result, for BLM the pipeline is an interdependent part of the proposed mine development, a larger action, and depends on that larger action for its justification. Therefore, the development of the proposed mine site and the requested pipeline ROW are, by definition, *connected actions* and must be analyzed as such in the BLM's NEPA review and decision-making process (40 CFR 1508.25(a)1).

1.4.3 PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION

The USDOT, PHMSA is mandated to ensure pipeline safety under Title 49, USC Chapter 601. Through PHMSA, the USDOT develops and enforces regulations for the safe, reliable, and environmentally sound operation of the nation's 2.3-million mile pipeline transportation system and the nearly 1 million daily shipments of hazardous materials by land, sea, and air. Within PHMSA, the Office of Pipeline Safety has the safety responsibility for the nation's natural gas and hazardous liquid pipelines. It develops safety regulations and other approaches to risk management that ensure safety in the design, construction, testing, operation, maintenance, and emergency response of pipeline facilities. USDOT pipeline standards are published in 49 CFR Parts 190 to 199, with Part 192 specifically addressing natural gas pipeline safety issues. Many of the regulations are written as performance standards that set the level of safety to be attained and allow the pipeline operator to use various technologies to achieve safety. Any alternative

requirements or variances to the requirements in the PHMSA regulations are set forth in Special Permits issued by PHMSA.

1.4.4 ENVIRONMENTAL PROTECTION AGENCY

EPA authority includes direct implementation of the *Resource Conservation and Recovery Act* (RCRA) and the *Oil Pollution Act* (OPA). EPA also has an oversight role of the State on the *Clean Air Act* (CAA) and the *Safe Drinking Water Act* (SDWA), as well as oversight of the State and the Corps on the CWA. Like the authority of the Corps, the EPA's authority extends, and its decisions following completion of the EIS will extend to the entire project, regardless of who owns the land. The following provides additional information about EPA's responsibilities:

- Under Section 402 of the CWA (33 USC 1251, et seq.), the EPA oversees the Alaska Department of Environmental Conservation's (ADEC's) administration of the Alaska Pollutant Discharge Elimination System (APDES) program that regulates the discharge of pollutants from a point source into waters of the United States for facilities and construction. Point source discharges that require an APDES permit include, but are not limited to, sanitary and domestic wastewater, dewatering of gravel pits and construction areas, hydrostatic test water, discharges from tailings ponds, mine drainage, storm water discharges, and, in some cases, process water. (40 CFR Part 122).
- Under Section 404 of the CWA (33 USC 1251 et seq.), the EPA reviews and comments on the Corps' Section 404 permit applications for compliance with the Section 404(b)(1) Guidelines and other statutes and authorities within its jurisdiction (40 CFR Part 230).
- Under Sections 165 and 502 of the CAA (42 USC 7401 et seq.), the ADEC is delegated authority to issue air quality permits for facilities operating within state jurisdiction for the Title V operating permit (40 CFR Part 70) and the Prevention of Significant Deterioration (PSD) permit (40 CFR 52.21) to address air pollution emissions. The EPA maintains oversight authority of the State's program.
- Under Section 309 of the CAA (42 USC 7401 et seq.), the EPA has the responsibility to review and comment on, in writing, the EIS for compliance with the Council on Environmental Quality (CEQ) regulations for implementing NEPA (40 CFR Parts 1500–1508).
- Under Sections 3001 through 3019 of the RCRA (42 USC 3251 et seq.), the EPA establishes criteria governing the management of hazardous waste. Any hazardous waste generated at a facility associated with the proposed project is subject to the hazardous waste regulations administered by the EPA.
- Under the CWA and OPA regulations (40 CFR Part 112), the EPA requires facilities that store, use, and manage petroleum products to develop a Spill Prevention, Control and Countermeasure (SPCC) Plan and a Facility Response Plan (FRP). The EPA has the responsibility to review these plans.

1.4.5 U.S. FISH AND WILDLIFE SERVICE

The FWS has responsibility and special expertise to conserve, protect and enhance fish, wildlife, and plants, and their habitats for the continuing benefit of the American people. These responsibilities include conservation of fish and wildlife resources (including mitigation

planning); implementing the regulations of the Federal Subsistence Board on National Wildlife Refuges;[8] maintenance and improvement of water quality in the interest of these resources; preservation, restoration, and maintenance of naturally functioning ecosystems on which these resources depend; and working cooperatively with other resource agencies to effectively gather high-quality information on species, their habitats, and the potential impacts of human development on these resources. The FWS has statutory authorities under many laws including the Fish and Wildlife Coordination Act, the National Wildlife Refuge System Administration Act, the *Alaska National Interest Lands Conservation Act* (ANILCA), the ESA, the MMPA, the Migratory Bird Treaty Act, and the *Bald and Golden Eagle Protection Act* (detailed in Section 1.10 below).

1.4.6 STATE OF ALASKA

The State of Alaska has agreed to participate as a cooperating agency in the development of the Donlin Gold EIS. The State of Alaska, through the Alaska Department of Natural Resources (ADNR), Office of Project Management and Permitting, in conjunction with ADEC, Alaska Department of Fish and Game (ADF&G), and other state agencies as necessary, have agreed to dedicate staff time and available resources to help develop an EIS which is thorough and comprehensive. The State of Alaska has special expertise with regard to land use, pipeline ROW issues, and fish and game habitat, as well as environmental protection standards applicable in Alaska. Donlin Gold will be responsible for applying for all necessary state permits and authorizations separate from the NEPA process. Participation as a cooperating agency does not satisfy any State of Alaska permitting or authorization requirements for Donlin Gold and does not imply State of Alaska concurrence with any decisions or conclusions reached by the Corps.

The NEPA process does not apply to permits and decisions issued by or from State of Alaska permitting entities. Donlin Gold will apply for State permits and authorizations separate from the NEPA process.[9] Nevertheless, the State of Alaska is actively participating in this EIS effort as a cooperating agency and will use the EIS in its decision-making. The State of Alaska has agreed to dedicate staff and expertise and to share technical knowledge to help the Corps and its contractors prepare a legally sufficient EIS. The federal agencies analyzing the potential effects of the proposed project through the NEPA process will take into consideration the roles and requirements of these entities in the federal decision making process.

[8] The FWS leads the interagency scientific and administrative staff to support the Federal Subsistence Board in implementation of the Federal Subsistence Management Program. This program applies on federal public lands in Alaska, including lands managed by the FWS, NPS, BLM, and USDA Forest Service. Federal subsistence fishing regulations apply on inland navigable and non-navigable waters within the exterior bounds of the federal conservation units, such as National Wildlife Refuges, National Parks, and National Forests, as well as national conservation and recreations units managed by the BLM.

[9] On April 9, 2014, Donlin Gold submitted an application to ADNR for a pipeline ROW lease on State of Alaska lands, under the terms of the Alaska Right-of-Way Leasing Act (AS 38.35.050).

1.4.7 VILLAGE OF CROOKED CREEK

The community of Crooked Creek has the closest proximity to the proposed Donlin Gold Project. The Crooked Creek Traditional Council is recognized as having a government-to-government relationship with the United States; with the responsibilities, powers, limitations, and obligations attached to that designation. The Traditional Council is eligible for funding and services from the U.S. Bureau of Indian Affairs. Furthermore, Crooked Creek is recognized as possessing certain inherent rights of self-government (i.e., tribal sovereignty) and is entitled to receive certain federal benefits, services, and protections because of their special relationship with the United States. The mission of the Crooked Creek Traditional Council is to enhance the quality of life, to promote economic opportunity, and to carry out the responsibility to protect and improve the trust assets of its membership.

The descriptions of the cooperating tribal governments were created largely using their own words.

1.4.8 NAPAIMUTE TRADITIONAL COUNCIL

The Village of Napaimute, located on the north bank of the Kuskokwim River approximately 28 miles east of Aniak in the Kilbuck-Kuskokwim Mountains, is represented by the federally recognized tribal government, the Napaimute Traditional Council. The Yup'ik word Napaimute means "forest people." The village was once called "Hoffman's" because an Englishman named George Hoffman established a trading post at the site in 1906. Napaimute was once an important supply and trade center for the central Kuskokwim River area. It began to dwindle in importance with the decline of the mining, fur, and reindeer industries. Residents migrated down the river to either Aniak or Bethel where government agencies were beginning to create more stable job opportunities. The Council has recently been active in economic development and environmental protection initiatives.

1.4.9 CHUATHBALUK TRADITIONAL COUNCIL/CENTER FOR SCIENCE AND PUBLIC PARTICIPATION

Located on the Kuskokwim River approximately 10 miles east of Aniak, the Native Village of Chuathbaluk is represented by the Chuathbaluk Traditional Council. The tribe, which cherishes its status as a sovereign tribal nation, has origins in the downriver settlement of Crow Village. In 1957, Crow Village Sam moved the settlement 20 miles upriver and established Chuathbaluk in its contemporary location. The Kuskokwim River is the lifeline of the Tribe, serving as a transportation corridor to support subsistence hunting and fishing. The Chuathbaluk Traditional Council is particularly active as caretakers of this land, preventing the plundering of the environment and protecting its resources and pristine beauty. The uncertain economic conditions make people rely heavily upon subsistence resources, mainly salmon and moose, but also non-salmon fish (40 percent of their subsistence diet consists of fish), caribou, beaver, birds, and berries.

The Chuathbaluk Traditional council has retained the services of the Center for Science and Public Participation (CSP2). Acting as a consultant, CSP2 does not serve directly as a cooperating agency, but instead provides technical advice and comments to the Chuathbaluk Traditional Council.

1.4.10 ANIAK TRADITIONAL COUNCIL

The community of Aniak is approximately 70 river miles downstream on the Kuskokwim River from Crooked Creek, the closest village to the proposed Donlin Gold Project. Aniak is also the main hub for the middle Kuskokwim and lower mid Yukon villages. The Aniak Traditional Council is a federally recognized tribal government for the community of Aniak. It works with both federal and state agencies in Alaska and the Lower 48. The Aniak Traditional Council is eligible for funding and services from the U.S. Bureau of Indian Affairs. Furthermore, Aniak Traditional Council is recognized as possessing certain inherent rights of self-government (i.e., tribal sovereignty) and is entitled to receive certain federal benefits, services, and protections because of their relationship with the various state and federal agencies. The goals of the Aniak Traditional Council are to enhance the quality of life, to promote economic opportunity, and to carry out the responsibility to protect and improve the trust assets of its members and traditional lifestyles.

1.4.11 KNIK TRIBAL COUNCIL

The Knik Tribal Council (KTC), a federally recognized tribe, provides state and federally contracted social, educational, and economic development services to tribal members in the Upper Cook Inlet region of Alaska. Located in southcentral Alaska, KTC has the largest Alaska Native Village Service Area (ANVSA) for a single tribal government covering over 25,000 square miles. There are over 10,000 Alaska Native and Indian people residing within this service area. KTC's traditional territory extends from the Upper Susitna-Watana River drainage to Point Mackenzie; and from Palmer to Rainy Pass in the Alaska Mountain Range. The KTC tribal government includes the following departments: Housing/Community Services, Tribal Development, Tribal Transportation, Finance, Information Technology, and Administration. KTC services include: Adult Vocational Training Assistance, Behavioral Health Counseling, Childcare Assistance, Report Card Incentive Program, Cultural and Subsistence Education for Youth, Indian Child Welfare Advocacy, Traditional Crafting Classes, Historical and Cultural Program Coordination, Social Service Referrals, Van Transportation, Emergency Assistance, Housing Modification/Rehabilitation, Low Income Rentals, Elder Housing Rehabilitation, General Assistance, and Care.

1.4.12 AKIAK TRIBE/KUSKOKWIM RIVER WATERSHED COUNCIL

The Akiak Native Community is a federally recognized tribe with a government-to-government relationship with the United States, with the responsibilities, powers, limitations, and obligations attached to that designation. The Akiak Native Community is eligible to receive contract funding directly from the federal government and furthermore, the Akiak Native Community is recognized as possessing certain inherent rights of self-government (i.e., tribal sovereignty) and is entitled to receive certain federal benefits, services, and protections of their special relationship with the United States.

The Akiak Native Community has an agreement with the Kuskokwim River Watershed Council to act as a consultant to Akiak Native Community which serves as the cooperating agency in the Donlin Gold EIS process.

1.5 PARTICIPATING AGENCIES

The U.S. Coast Guard (USCG) and the National Oceanic Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries/NMFS) serve as participating agencies in the review of this EIS. These agencies have the opportunity to provide comments during the development of the EIS. In addition, they may choose to participate more selectively in the cooperating agency meetings, particularly when an issue in their area of jurisdiction is under discussion.

The USCG with the Department of Homeland Security approves safety features in ports and waterways under Title 33 Navigation and Navigable Waters (33 CFR Parts 160 to 169) Subchapter P, Ports and Waterways Safety. The USCG reviews Application for Cargo Transfer Operations, Port Operations Manual Approvals, Facility Response Plans (FRPs), and Private Aids to Navigation Authorization, Tug and Barge Vessel Inspections, and Notice to Mariners.

NOAA Fisheries/NMFS is responsible for providing consultation on the effects of Essential Fish Habitat (EFH) under the *Magnuson-Stevens Fishery Conservation and Management Act* (16 USC 1801-1883). NOAA Fisheries additionally has responsibility through the MMPA (16 USC 1361, et seq.) and the ESA of 1973 (16 USC 1531-1544).

1.6 TRIBAL COORDINATION AND GOVERNMENT-TO-GOVERNMENT CONSULTATION[10]

The Corps, as the lead federal agency, has the responsibility to coordinate directly with federally recognized tribal governments during preparation of the Donlin Gold Project EIS in compliance with Executive Order 13175, Consultation and Coordination with Indian Tribal Governments (Section 1.10.25), and the Corps' Tribal Consultation Policy. The other federal cooperating agencies (BLM, FWS, and EPA) may also conduct joint or separate government-to-government consultation, under their departmental and agency policies. There are three general avenues of participation open to tribes: through the public process as stakeholders, as cooperating agencies with special expertise, and through the government-to-government relationship. The government-to-government relationship between federal agencies and federally recognized tribes is a special relationship based on tribal sovereignty. Details about the government-to-government consultation conducted for the Donlin Gold EIS are provided in Chapter 6, Consultation.

1.7 SCOPING AND PUBLIC OUTREACH

NEPA requires "scoping" which is described in 40 CFR 1501.7 as "an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action, the process shall be termed scoping…". A Public Involvement Plan was developed prior to scoping to provide the basis for the Corps and the cooperating agencies to provide guidance for the public outreach activities. Details about the scoping notice, public scoping meetings, agency scoping meetings, comments received during scoping, and additional

[10] The phrase "tribal coordination" refers to interaction at the staff level. The phrase "Government-to-Government Consultation" refers to meetings between Tribal Leadership and the Alaska District Engineer (Colonel).

public outreach are discussed in Chapter 6, Consultation. The Scoping Report is included in Appendix B.

1.8 ISSUES SELECTED FOR ANALYSIS

Highlighted Issues

- Barge Traffic
- Subsistence
- Fisheries
- Socioeconomics
- Water Flow
- Contaminants in Air and Water
- Hazardous Chemicals
- Spills

In compliance with NEPA scoping requirements and to focus the EIS, the Corps and cooperating agencies selected substantive impact topics for further analysis and eliminated others from evaluation. Based on scoping comments, issues were selected for analysis and are organized below by their relationship to the physical, biological, and social environments. These issues are briefly described in this section and documented as statements of concern in the Scoping Report.

1.8.1 PHYSICAL ENVIRONMENT

Air Quality: The mine, transportation facilities, and pipeline have the potential to generate human-caused air quality impacts (fugitive dust/particulates and suspended heavy metals from mining, blasting, vehicles, power generation, incineration) in the Project Area.

Emissions and Greenhouse Gas: The proposed project could contribute to greenhouse gas emissions through both the removal of carbon sinks (such as permafrost and vegetation) and the addition of carbon source emissions from vehicles, power generation, and incineration.

Climate Change: Climate driven changes over time that could contribute to impacts expected in the Project Area and are analyzed for impacts to: the physical environment (permafrost, glacial discharge, precipitation, river levels, storms, flooding events); biological environment (vegetation, fish, and wildlife) and social environment (subsistence and barge traffic). Climate change models were analyzed to predict the range of climate driven change that may be expected over the life of the project.

Floodplains: The project and proposed alternatives could construct facilities in floodplains, which could increase the risk of hazardous spills, sedimentation, and impacts to water quality. Potential for changes in river geomorphology, and impacts on fish, wildlife, habitat, and subsistence activities are analyzed under physical, biological and social environments in the EIS. (See Section 1.10.27, Executive Order 11988, *Floodplain Management*.)

Geology: Construction activities could alter soils, permafrost, topography, landforms, and affect paleontological resources. Surface disturbance could result in greater erosion and sedimentation at the mine site and rivers. Geological hazards, particularly seismic events, could affect vulnerable components including the tailings storage facility, buried pipeline, and fuel storage tanks. Surface and subsurface geological conditions, including avalanche hazards and permafrost, could affect project construction unless properly mitigated. Slope stability hazards along the pipeline route need to be identified and assessed.

Groundwater: Potential impacts to groundwater systems and aquifers including mercury contamination from construction and operation of all project sources will be evaluated. The potential for mine operations to reduce the water table and to reduce flow in Crooked Creek will be assessed.

Hazardous Materials and Waste Management: This issue area is particularly broad and included 29 separate statements of concern. Analyses were requested for potential effects from mercury and cyanide handling and detoxification; mobility, toxicity, and management of naturally occurring arsenic; and risk of and response to chemical and fuel spills and accidents.

Hydrology (Surface Water): The proposed project could affect streams and local water bodies, and disrupt local water patterns. Analysis of precipitation regimes and storm events are critical to evaluating the design and risks of impacts from water holding facilities, including the tailings storage pond. Barge traffic could affect riverine systems, including through wave-induced erosion to shore banks. The proposed project will need a source of water for construction and operations activities. The analysis of the mine site will include an assessment of surface water inputs, outputs, and net changes (water budget) over the longer term.

Water Quality: The proposed project could affect water quality from construction, operations, reclamation, and long-term tailings and rock storage. Acid rock drainage, metal leaching, erosion, turbidity, temperature changes, and fuel and chemical spills are among the potential risks to be addressed in this EIS.

1.8.2 BIOLOGICAL ENVIRONMENT

Migratory Birds and Their Habitat: The proposed project could have potential impacts to migratory birds, waterfowl, and shorebird population abundance, diversity, and migratory patterns. There is potential for displacement, contamination, and mortality from project components or spills; strikes from above-ground infrastructure; removal of nests; and attraction of scavengers; these issues will be considered in light of the requirements of the *Migratory Bird Treaty Act* (Section 1.10.17).

Bald and Golden Eagles and Their Habitat: The proposed project could have potential impacts to bald and golden eagles and their habitat. Activities may result in removal of nests, loss of habitat, contamination of prey, and disturbance of birds during construction, operations, and maintenance of the project. Issues will be considered in accordance with the *Bald and Golden Eagle Protection Act* (Section 1.10.18).

Fish, Aquatic Organisms, and Their Habitat: The proposed project could affect salmon and resident fish (e.g., whitefish, pike, and trout) and EFH through barge traffic, water diversion, noise and visual disturbance, changes in temperature regime and water quality, and displacement in streambeds. Pipeline construction and operation could affect salmon spawning beds and passage. Roads and project construction could increase sediment loads in streams, alter stream banks, cause erosion in adjacent areas, and introduce pollution to fish habitat from accidental spills. (The *Magnuson-Stevens Fishery Conservation and Management Act* is covered in Table 1.10-2 under the National Oceanic and Atmospheric Administration (NOAA) in relation to “Essential Fish Habit” consultation responsibilities.)

Marine Mammals: The increase in marine and river barge traffic and the potential for spills could affect marine mammals and their habitat. This EIS will analyze the potential for such impacts considering the *Marine Mammal Protection Act* (Section 1.10.16) prohibition of “takes” of marine mammals.

Terrestrial Wildlife: The proposed project would traverse a range of habitat types important to terrestrial wildlife species. Construction impacts of the proposed project may include loss of habitat, permanent and long-term alteration of habitat, obstruction of migratory patterns, and

disturbance. Following construction, additional disturbance may occur during operations and maintenance, and closure and reclamation. Other potential impacts could include disturbance from increased recreational use and changes in hunting and trapping pressure due to changes in access. Concern has been expressed about the long-term impacts to terrestrial wildlife populations in the area.

Threatened and Endangered Species: Section 7(a)(2) of the ESA states that each Federal agency shall insure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Construction and operations plans for the proposed project will be analyzed to determine whether these activities could directly or indirectly affect these species or their habitat.

Vegetation: Vegetation would be cleared at the mine site, transportation infrastructure corridors, and in the pipeline ROW. Removal of vegetation could result in: soil erosion; loss of topsoil with its native vegetative seed bank; delayed reclamation; and spread of invasive plant species (invasive weeds). In addition, fugitive dust could affect adjacent vegetation and habitats, both tundra and riverine.

Wetlands and Aquatic Communities: Potential effects to wetlands and aquatic communities are key to this EIS because of Section 404 of the CWA. Comments also cited Executive Order 11990, Protection of Wetlands (Section 1.10.28). The proposed project would occur in and affect wetlands and streams; construction of the proposed mine and pipeline would require the fill of wetlands and the placement of fill, culverts, and associated structures in streams. The proposed project could cause fragmentation of wetlands, changes in surface and groundwater hydrology, introduction of increased levels of disturbance from human activities, and introduction of exotic or invasive species. Aquatic resources habitat and water quality sensitivities will be fully analyzed. Streams, and high value wetlands or wetlands that might be unique or relatively scarce in the Project Area would be analyzed.

1.8.3 SOCIOECONOMIC ENVIRONMENT

Cultural and Historic Resources: Consideration of effects to cultural resources and historic properties is required under the NHPA and NEPA. Historic properties are defined as "any prehistoric or historic district, site, building, structure or object included in, or eligible for inclusion in, the National Register of Historic Places." Historic properties must meet National Register criteria. Cultural resources could be affected by the proposed project, particularly during the construction phase.

Environmental Justice: Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations* (Section 1.10.29), requires all federal agencies to identify and address disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. The proposed project will be assessed for potential environmental justice impacts.

Iditarod National Historic Trail: Scoping comments cited potential effects that construction and operation of the pipeline may have on the physical trail, uses of the trail, the viewshed along the trail, and the recreational experience of individuals and commercial recreational activity in the vicinity of the trail.

Land Ownership, Management, and Use: Commenters expressed concerns about impacts from an increase in legal and non-legal access; compatibility of alternatives with land management objectives (e.g., the Yukon Delta Wildlife Refuge or the Susitna Flats State Game Refuge); and impacts to scenic and visual characteristics, wildlife, opportunities for solitude and primitive recreation; and existing trail usage.

Public Health: Scoping comments included requests to document existing health status and access to care. The project has potential to affect worker safety and physical health, including exposure to new environmental contaminants. Large projects may be associated with impacts to behavioral health, including substance abuse and domestic violence. Commenters urged that the analysis also evaluate wellness initiatives and the potential for communities to plan ahead to address new health needs.

Recreation: Potential impacts on recreation, tourism, recreational hunting and recreation usage near the mine, along river systems, and in the pipeline corridor during construction and operations will be evaluated.

Socioeconomics: The proposed project could alter aspects of the socioeconomic environment on a local and regional scale. Demographics (population trends with in-migration and out-migration), employment (direct and indirect), household income, housing, and public infrastructure are among the factors that could be affected. The analysis should assess both the project itself and longer term effects after the project is complete. Socioeconomics will also address and assess financial assurances including bonding associated with mine closure, reclamation, and monitoring.

Subsistence and Traditional Way of Life: Subsistence practices could be affected due to changes in resources from habitat loss or disturbance and disruption of movement patterns of certain fish, terrestrial mammals, and birds. Impacts to subsistence uses could include disruption of access to subsistence hunting and fishing during construction, increasing competition for subsistence resources through improved access (mine access or pipeline shoofly roads or airstrips). New jobs and incomes may also result in socio-cultural effects on subsistence practices. An ANILCA Section 810(a) Evaluation and Finding will be required to determine if the proposed project may result in a significant restriction of subsistence uses.

Transportation: Construction and operation of the proposed project could affect regional and local transportation systems, with crowding or displacement of current uses at airports, roads, ports, and rivers supporting barge traffic.

Visual Resources: The proposed mine, related infrastructure, and pipeline corridor could affect visual resources and scenery in the project vicinity. Potential impacts to scenic resources could occur from vegetation clearing, development of the mine site, river crossings, and overall increased activity in areas that are considered visually sensitive. Decreases in the quality of visual landscape could occur during construction, operations, and after decommissioning of the mine.

Wilderness Characteristics: Some of the proposed project area contains lands with wilderness characteristics. The construction and brushing of the pipeline corridor could affect wilderness characteristics.

1.9 ISSUES DISMISSED FROM ANALYSIS

Among the scoping comments were a small number that raised issues beyond the scope of the EIS of the proposed Donlin Gold Project. The following issues were dismissed without further analysis, for the reasons outlined in each section.

1.9.1 POTENTIAL FINANCIAL UNCERTAINTY OF PROJECT PARTNERS

Scoping comments suggested this EIS was premature given published reports that one of the partners has not committed to investment in construction of this project. The permit applications that lead to this effort are active and have not been withdrawn. Accordingly, speculation about whether or not this project will be constructed by the partners will not be further considered in this EIS.

1.9.2 LAND MANAGEMENT POLICY OR DECISIONS OF ANCSA CORPORATIONS

Scoping comments indicated concern about ANCSA corporation land management policy, or permitting decisions regarding private lands and the potential to exclude traditional uses of these lands. A commenter stated that Calista and TKC had not held meetings in Crooked Creek to address these concerns.

The decisions of the ANCSA corporations as private land owners to make their lands available for mining and related activities are beyond the scope of this EIS because those private lands are not owned or managed by federal entities. The potential effects of mining on those lands are within the purview of this EIS because federal permits would be required.

1.9.3 SOURCE OF AND METHOD OF PRODUCTION FOR NATURAL GAS USED BY THE PROJECT

Scoping comments indicated concern about whether natural gas that would be used by the project would be produced using "fracking" techniques. Other comments addressed where the gas would or should be produced. The source of and production methods of natural gas are beyond the scope of this EIS because they are not a component of any federal permit required for this project. Additionally, the project proposes to purchase natural gas on the open market by linking with the existing pipeline system near Beluga, Alaska. Gas for the project would not be from a specific source. Potential sources at this time include any natural gas producer in Cook Inlet, Alaska.

1.9.4 EFFECTS ON LIMITS OF THE TERRITORIAL SEA (33 CFR 320.4(F))

Discussion of this factor was determined to be unnecessary for analysis because the proposed project is not located near territorial seas. The Corps' ROD will further define the limits of analysis required for this factor.

1.9.5 FOOD AND FIBER PRODUCTION (33 CFR 320.4(A))

Discussion of this factor, which is a consideration in the Corps' Public Interest Review, was determined to be unnecessary for analysis because the project does not affect agricultural lands. The Corps' ROD will further define the limits of analysis required for this factor.

1.9.6 PRIME AND UNIQUE FARMLAND (40 CFR 1508.27(B)(3))

CEQ regulations require the analysis of impacts to unique characteristics of a geographic area, such as prime farmland. Prime farmland is land which has the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management. This project does not affect prime and unique farmland. The Corps' ROD will further define the limits of analysis required for this factor.

1.10 PERMITS, APPROVALS, COMPLIANCE WITH EXECUTIVE ORDERS AND REGULATORY REQUIREMENTS

Key federal laws and Executive Orders pertaining to this EIS are described below. Laws governing permits and authorizations required by the proposed project or alternative, including state and local government permits are addressed in Table 1.10-2. The purpose of Section 1.10 is not to be exhaustive, but to provide the reader with a sound sense of the regulatory framework governing Donlin Gold's proposed project or any alternative, rules governing agency decision-making, and the key permits and authorizations necessary for approval of a project that would meet the "purposes and needs" described within this chapter.

1.10.1 NATIONAL ENVIRONMENTAL POLICY ACT OF 1969

The *National Environmental Policy Act* of 1969 (42 USC 4321 et seq.) applies to all federal agencies and their decisions that have the potential to affect the environment. It establishes the procedures that federal agencies follow to make major decisions in a public forum while disclosing the environmental implications of the potential decision.

The President's CEQ has issued NEPA regulations and guidance for all agencies. NEPA requires the implementation of the appropriate level of NEPA process (public involvement and document preparation) to be conducted with respect to a major federal action that has the potential to significantly affect the human environment.

This EIS was prepared according to the Corps' regulations implementing NEPA (33 CFR Part 230), which state that an EIS must provide detailed information regarding the proposed action and alternatives, the environmental impacts of the alternatives, potential mitigation measures, and any adverse environmental impacts that cannot be avoided if the proposal is implemented. This Draft EIS includes analysis of measures to avoid and minimize impacts to fish, wildlife, habitats, and other resources. The Final EIS will address compensatory mitigation for impacts which cannot be avoided or minimized. It must be demonstrated that these factors have been considered by decision makers prior to undertaking actions such as issuing permits.

1.10.2 CLEAN WATER ACT (1972)

Section 404 of the CWA requires that a Corps permit be obtained for the placement or discharge of dredged and/or fill material into waters of the U.S., including jurisdictional wetlands (33 USC 1344). The Corps defines wetlands as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. The Corps evaluates proposed actions for compliance with the Section 404(b)(1) Guidelines, which were developed by the EPA in conjunction with the Secretary of the Army.

The EPA reviews and comments on permit applications for compliance with Section 404(b)(1) Guidelines and other statutes and authorities within their jurisdiction.

Under Section 402 of the CWA, discharges to surface waters from construction, operation, and reclamation of the Donlin Gold Project would require compliance with the National Pollutant Discharge Elimination System, administered by the ADEC as the Alaska Pollutant Discharge Elimination System (APDES). The EPA provides oversight of the state-issued wastewater permits subject to the requirements of the APDES. During construction, the Alaska Construction General Permit would require a Storm Water Pollution Prevention Plan (SWPPP). During operations, the discharges from advanced pit dewatering will also be subject to the APDES program and depending on the method of disposal domestic wastewater could require APDES coverage.

1.10.3 RIVERS AND HARBORS ACT (1890, 1899)

Section 10 of the RHA of 1899 requires that a Corps permit be obtained for structures or work in, or affecting, navigable waters of the U.S. (33 USC 403), which includes excavation or deposition of material in navigable waters, or other actions that could affect the course, location, condition, or capacity of these waters. Construction of docks and barge landings on the Kuskokwim River, and if needed at the Beluga barge landing, would require approval under Section 10 from the Corps.

1.10.4 FINANCIAL ASSURANCE FOR RECLAMATION AND CLOSURE

The State of Alaska will require financial assurance to assure completion of reclamation and closure activities, including long-term post closure management requirements, and for management of wastes to prevent water pollution. The BLM will require financial assurance for reclamation of the portion of the natural gas pipeline that is on land managed by BLM. The following summary of the reclamation process is extracted from Appendix A – Financial Assurance (Donlin Gold 2015).

1.10.4.1 MINE SITE FINANCIAL ASSURANCE

There are three State of Alaska permits/approvals for the project that will require establishment of financial assurance: approval of the Project Reclamation Plan by the ADNR; issuance of the Project Integrated Waste Management Permit (IWMP) by the ADEC, and issuance of the Certificates of Approval to Construct the Donlin Gold Project dams issued by ADNR.

The mechanism (instruments) for financial assurance acceptable to the State of Alaska agencies must be established prior to final state approvals and permits. Requirements for reclamation financial assurance are found in 11 AAC 97.400. Bonds may be in the form of corporate surety or a personal bond accompanied by a letter of credit, certificate of deposit, or a deposit of cash. Acceptable forms of financial assurance for an IWMP include self-insurance, insurance, surety bond, letter of credit, certificate of deposit, or other guarantee approved by the ADEC (AS 46.03.100(f)). The statute also allows for the use of corporate guarantees, but only after the state adopts regulations establishing financial tests, which ADEC has not done. Dam safety regulations allow flexibility regarding the type of financial assurance ("must provide a performance bond or other financial assurances adequate to provide sufficient money…" 11 AAC 93.171(f)(2)(C)).

In practice, financial assurance for reclamation, waste and water management (IWMP), and dam closure for large mine projects have been combined into a single financial assurance (see more on the coordinated State of Alaska process, below) and are typically guaranteed through letters of credit and sureties (ADNR 2014).

Alaska statutes also provide for the establishment of trust funds to cover reclamation and associated costs. Trust funds could be used by the state for: reclamation; dam maintenance; monitoring, control and treatment of water and other leachates; protection of surface and groundwater; and long-term site maintenance (see AS 37.14.820). The State of Alaska has not developed regulations or guidance on how to implement the trust fund statutory language. However, that does not prevent the establishment and use of a trust fund, which may be particularly well-suited for long-term, post-closure costs.

ADNR and ADEC coordinate the process for reviewing and approving the Reclamation and Closure Plan, issuing the IWMP, and issuing Certificates of Approval to Construct dams. Review and approval of required financial assurance is done as part of that coordinated state review process.

Typically, development of the financial assurance cost estimate is an iterative process that occurs during Project review and permitting. Initial drafts of the Reclamation and Closure Plan, IWMP, and dam preliminary design packages may include draft cost estimates. Historically ADNR and ADEC have completed preliminary reviews of cost estimates to determine if the costs are representative of costs incurred with similar projects. At the draft Reclamation and Closure Plan stage, a range of cost estimates has been sufficient to allow ADEC to move forward with development of a draft IWMP concurrent with or following issuance of a Draft EIS. Therefore, at the Draft EIS stage it is possible to have a range of preliminary cost estimates available for the proposed action.

The estimated financial assurance amount associated with the IWMP will be subject to a public review period during the public review of the IWMP. During the review period, any person who disagrees with the decision may request an adjudicatory hearing in accordance with 18 AAC 15.195-340 or an informal review by the ADEC Division Director in accordance with 18 AAC 15.185.

The State is not required to offer a public comment period on the Reclamation and Closure Plan and Dam Certificates and associated financial assurance. However, ADNR generally provides public notice of Reclamation Plan approval during the IWMP review period. Reclamation Plan approval is subject to appeal in accordance with 11 AAC 02.

ADNR and ADEC generally wait to issue the final authorizations and permits until after the Final EIS is issued since this provides clarity in the selected alternative and allows the State of Alaska to incorporate applicable mitigation measures into its authorizations and approvals. At this point (after the Final EIS is issued), more accurate and complete reclamation and closure costs can be developed.

The final financial assurance amount will be based on the final approved Reclamation and Closure Plan, the final IWMP, and dam certificates of approval and may be different than the amount in the preliminary cost estimate depending upon changes that occur between the draft and final plans and permits.

State regulations allow for financial assurance amounts to be increased at any time if it is determined that the amounts are inadequate. In practice, the State reviews financial assurances as part of the IWMP renewal cycle which has a 5-year term.

Financial assurance examples for other Alaska Mines are shown in Table 1.10-1.

Table 1.10-1: Financial Assurances for Alaska Mines

Mine	Mechanism	Amount
Fort Knox Mine	Letter of Credit	$65,800,000
Greens Creek Mine	USFS Surety Bond	$30,500,000
Kensington Project	USFS Surety Bond	$28,700,000
NiBlack Project	Letter of Credit	$1,200,000
Nixon Fork Mine	BLM Surety Bond	$6,000,000
Pogo Mine and Road	Letter of Credit	$57,100,000
Red Dog Mine	Letter of Credit	$305,200,000
Rock Creek Mine	Letter of Credit	$13,500,000

Source: ADNR 2014c.

1.10.4.2 PIPELINE FINANCIAL ASSURANCE

The project will require ROW authorizations from the BLM and ADNR for the natural gas pipeline. The Alaska Right-of-Way Leasing Act (AS 38.35) grants broad powers to the Alaska Commissioner of Natural Resources in granting leases and right-of-way leases on state land for pipeline construction, transmission, operation, and termination. Per AS 38.35.100(a)(3), the commissioner shall determine if the applicant has the technical and financial capability to protect and prevent degradation of items and activities listed in the statute, which include measures to (A) prevent any significant adverse environmental impact, including but not limited to erosion of the surface of the land and damage to fish and wildlife and their habitat; and to (B) undertake any necessary restoration or revegetation. The amount and form of financial assurance is established based on an iterative process, which is similar to the iterative process for pipeline leases on BLM-managed lands. Final financial assurance amounts are developed toward the end of the permitting process.

Donlin Gold has requested ROW authorization and Temporary Use Permits (TUPs) for the portions of the natural gas pipeline on BLM-managed land. BLM regulations at 43 CFR 2885.11(b) allow the BLM to require that a holder of a ROW grant or TUP furnish a bond or other security satisfactory to secure all or any of the obligations imposed by the ROW grant and temporary use permits and applicable laws and regulations. The bond or other acceptable security would cover any losses, damages, or injury to human health, the environment, and property in connection with the use and occupancy of the ROW or TUP area. The bond must also cover liability for damages or injuries resulting from releases or discharges of hazardous materials. The bond or security amount may increase or decrease during the term of the authorization or permit, as required by BLM.

1.10.5 ALASKA NATIONAL INTEREST LANDS CONSERVATION ACT (1980)

ANILCA, Public Law 96-487 (16 USC 3101–3233) added 106 million acres to federal conservation system units in Alaska. Title III of ANILCA combined three existing wildlife refuges: Nunivak Island Reservation, Hazen Bay Migratory Bird Waterfowl Refuge, and Clarence Rhode National Wildlife Range, and created the Yukon Delta National Wildlife Refuge, which falls within the EIS Analysis Area. ANILCA includes a number of provisions intended to allow for infrastructure and economic growth in general, travel and access in conservation system units, and pursuit of a subsistence lifestyle while protecting resource values. ANILCA helps provide context for evaluation of potential effects to the landscape, but ANILCA provisions do not apply beyond designated federally-managed land boundaries and do not apply to the lands on which the Donlin Gold Project is proposed.

ANILCA is a multifaceted law and two titles of particular note to this EIS include:

- Title VIII of ANILCA defines subsistence as customary and traditional uses of wild renewable resources by rural Alaska residents (Section 803), establishes a subsistence priority on federal public lands and waters (Section 804), and provides for a system of regional advisory councils to insure the participation of rural residents in subsistence management (Section 805). Section 810 of ANILCA requires analysis of impacts to subsistence from federal land use decisions. Section 811 ensures reasonable access to subsistence resources on federal public lands, including the use of snowmobiles, motorboats, and other means of surface transportation traditionally employed for subsistence purposes, subject to reasonable regulation.
- Title IX of ANILCA clarifies the implementation of ANCSA and the *Alaska Statehood Act* Section 906(k) requires state concurrence on selected lands prior to granting a ROW.

1.10.6 ALASKA NATIVE CLAIMS SETTLEMENT ACT (1971)

Alaska Native regional and village corporations own lands and minerals in the Project Area under the provisions of ANCSA (43 USC 1601, et seq.). Calista and the Cook Inlet Region, Inc. are Alaska Native Regional Corporations, formed pursuant to Section 7 of ANSCA. TKC is an Alaska Native Village Corporation, formed pursuant to Section 8 of ANCSA..

1.10.7 MINERAL LEASING ACT (1920)

Section 28 of the *Mineral Leasing Act* provides the authority to issue oil and gas pipeline ROWs across federal land. Donlin Gold's proposed pipeline would require a ROW to cross BLM managed land.

1.10.8 FEDERAL LAND POLICY AND MANAGEMENT ACT (1976)

BLM's organic act, FLPMA, provides for multiple uses of public lands while protecting these lands from unnecessary or undue degradation. The Donlin Gold Project would occupy BLM lands managed under FLPMA.

1.10.9 NATIONAL TRAILS SYSTEM ACT (1968)

The *National Trails System Act* as amended (16 USC 1241-1251) was enacted to promote public access to recreation, and scenic and historic trails through preservation. The INHT was established pursuant to the Act through Public Law 95-25 in 1978. The BLM, as the statutorily

designated federal administrator for the INHT, manages portions of the INHT on BLM-managed "Public Lands" and is the federal point-of-contact for INHT matters. Donlin Gold's proposed gas pipeline ROW intersects the INHT on lands managed by the State of Alaska.

1.10.10 PIPELINE SAFETY, REGULATORY CERTAINTY, AND JOB CREATION ACT OF 2011

The *Pipeline Safety, Regulatory Certainty, and Job Creation Act* was enacted to improve and examine the state of pipeline safety regulations. Enforcement falls under the jurisdiction of PHMSA, a USDOT agency that regulates and enforces the operations of pipeline transportation systems in the U.S. and oversees pipeline infrastructure. It is responsible for safe, reliable, and environmentally sound pipeline operations. Refer to Section 1.3.5 for information on how the Donlin Gold Project would need a Special Permit from PHMSA for using Strain Based Design.

1.10.11 CLEAN AIR ACT (1970)

The *Clean Air Act* of 1970, with amendments in 1990, addresses standards for many categories of air pollutants and defines how the EPA implements its regulatory authority for air quality (42 USC 85). The requirements of this law encompass many pollution sources, provide health-based standards, and identify control methods to reduce the emission of common air pollutants. The potential construction and operation of a mine and power plant would introduce activities that are associated with particle pollution and ground-level ozone. Both of these forms of air pollution, and others, have known health effects and would be subject to further evaluation under federal- and state-implemented air quality management programs. Implementation of the *Clean Air Act* has been delegated to the State of Alaska, so ADEC would issue any air permits associated with this project. EPA provides oversight of the state-issued air permits.

1.10.12 ENDANGERED SPECIES ACT (1973)

The ESA of 1973 was enacted to conserve species that have been found to be at risk of extinction in all or a substantial portion of their ranges, and to conserve the ecosystems and habitats upon which they rely. The FWS and NMFS have regulatory authority for implementing the ESA. In general, FWS is responsible for managing the terrestrial animal and plant species listed as endangered and threatened, and generally coordinates related issues for terrestrial and freshwater species, while NMFS is responsible for most marine mammals and anadromous fish species. Some marine mammals, including the Pacific walrus and northern sea otter, are managed by FWS. Donlin Gold Project barge traffic would traverse areas where threatened or endangered species occur.

1.10.13 HISTORIC PRESERVATION LAWS

The NHPA of 1966 (as amended), the *Archaeological Resources Protection Act* of 1979, the *Antiquities Act* of 1906, and the *Alaska Historic Preservation Act* (1971) guide the management of cultural resources and historic properties. Under Section 106 of the NHPA (36 CFR Part 800), federal agencies are required to consider the effect of their actions on historic properties listed on, or eligible for, the National Register of Historic Places. The NHPA allows sites of traditional religious and cultural significance to Native Americans or Alaska Natives to be considered eligible for the National Register. Section 106 requires a process of consultation with the Advisory Council on Historic Preservation, State Historic Preservation Officer, Indian (or Alaska Native) tribes, local governments, and other interested parties to identify historic

properties and determine the effects of the action on those resources. If historic properties will be adversely affected by a project, the agency must, again in consultation, resolve the effects through appropriate mitigation. The Donlin Gold Project has the potential to affect cultural resources and historic properties. 36 CFR 800.14 allows for the resolution of adverse effects from complex projects through negotiation of a programmatic agreement between federal agencies and the Advisory Council on Historic Preservation. Inventory, documentation, and preservation of cultural resources and traditional cultural properties and mitigation of adverse impacts from the Donlin Gold Project would be based on a programmatic agreement that is currently under development with consultation among Donlin Gold, the Corps, BLM, the Advisory Council on Historic Preservation, Alaska State Historical Preservation Officer (SHPO), and tribal representatives.

1.10.14 NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT

Native American Graves Protection and Repatriation Act (NAGPRA, 25 USC 3001) requires that discovery or disturbance of any human remains on federal or tribal lands in the Project Area must be accounted for and protected and/or properly returned to the tribe of origin. The potential for impacts from the Donlin Gold Project to resources protected under NAGPRA must be evaluated in the EIS.

1.10.15 AMERICAN INDIAN RELIGIOUS FREEDOM ACT OF 1978

The *American Indian Religious Freedom Act* of 1978 (42 USC 1996) requires federal agencies to consider Native American religious concerns when a federal management decision has the potential to impact an Indian religious practice or a spiritually significant site (on both federal and non-federal lands affected by the federal action). The potential for impacts from the Donlin Gold Project to activities protected under this Act must be evaluated in the EIS.

1.10.16 MARINE MAMMAL PROTECTION ACT (1972)

FWS and NMFS have regulatory authority for implementing the *Marine Mammal Protection Act*, which prohibits the harassment, hunting, capture, or killing of marine mammals, or the attempt to harass, hunt, capture, or kill marine mammals. The law provides exceptions for authorized scientific research and subsistence uses by Alaska Natives. Actions that have potential to take marine mammals must be reviewed and approved by the regulating agencies. Donlin Gold barge traffic would traverse areas where marine mammals occur.

1.10.17 MIGRATORY BIRD TREATY ACT (1918)

The *Migratory Bird Treaty A*ct of 1918 implements several international conventions to protect migratory birds. Following treaty amendments in 1997, regulations for subsistence bird harvests were established under the purview of the Alaska Migratory Bird Co-Management Council, operating under authority of the Migratory Bird Treaty Act, as amended. Under the Migratory Bird Treaty Act, takings are prohibited unless expressly authorized or exempted. The EIS will address potential impacts of the project and associated infrastructure on all birds protected under the *Migratory Bird Treaty Act* including birds of conservation concern and areas of bird concentrations.

1.10.18 BALD AND GOLDEN EAGLE PROTECTION ACT (1940, 1962)

The *Bald and Golden Eagle Protection Act* (16 USC 668, et seq.) provides for the protection of the bald eagle and the golden eagle by prohibiting, except under certain specified conditions, the take, possession, and commerce of such birds. Eagle take permits may be necessary for activities that result in removal of nests, loss of habitat, and disturbance of birds during construction, operations, and maintenance of the project. The EIS will identify the presence of eagles or their nests in the Project Area (along with associated infrastructure routes), and analyze potential impacts of the proposed project on both bald and golden eagles as protected under the Bald and Golden Eagle Protection Act. Alaska specific information can be found at: http://alaska.fws.gov/eaglepermit/index.htm.

1.10.19 FISH AND WILDLIFE COORDINATION ACT (1980)

The *Fish and Wildlife Coordination Act* of 1980 (16 USC 661, et seq.) requires consultation with FWS when any water body is impounded, diverted, controlled, or modified for any purpose. The FWS and state agencies charged with administering wildlife resources are to conduct surveys and investigations to determine the potential damage to wildlife and the mitigation measures that should be taken. The FWS incorporates the concerns and findings of state and other federal agencies, including NMFS, into a report that addresses fish and wildlife factors and provides recommendations for mitigating or enhancing impacts to fish and wildlife affected by a federally constructed, permitted, or licensed water development project, such as the Donlin Gold Project.

1.10.20 NATIONAL WILDLIFE REFUGE SYSTEM ADMINISTRATION ACT OF 1966, AS AMENDED

The *National Wildlife Refuge System Administration Act* (16 USC 668dd-668ee), as amended by the *National Wildlife Refuge System Improvement Act* of 1997 (Public Law 105-57), established a unified mission for the National Wildlife Refuge System and a compatibility standard for assessing proposed uses within a refuge. The refuge system is dedicated to the conservation of fish, wildlife, and plant resources and their habitats in the refuge. Although the proposed project would not install infrastructure on a refuge, the activities of the Donlin Gold Project have the potential to affect refuge land and resources.

1.10.21 MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

To provide for the conservation and management of sustainable fisheries, the Magnuson-Stevens Fishery Conservation and Management Act sets forth a mandate for NMFS, regional fishery management councils, and other federal agencies to identify and protect important marine and anadromous fish habitats (16 USC 1801-1883). Federal agencies must consult with NOAA Fisheries/NMFS on actions or proposed actions authorized by the federal agency that may adversely affect EFH. EFH includes habitats necessary to a species for spawning, breeding, feeding, or growth to maturity. The Donlin Gold Project has potential to affect EFH.

1.10.22 RESOURCE CONSERVATION AND RECOVERY ACT OF 1976

Under this act, the EPA develops and implements regulatory programs to manage hazardous waste from generation until ultimate disposal, including issuing an identification number for any entity that generates hazardous wastes. Construction, operation, and reclamation of the proposed Donlin Gold Project would generate wastes subject to RCRA rules.

1.10.23 TOXIC SUBSTANCES CONTROL ACT OF 1976

Under the *Toxic Substances Control Act* (TSCA) of 1976 (15 USC 2601), the EPA develops and implements regulatory requirements for the testing of new and existing chemical substances and regulates the treatment, storage, and disposal of certain toxic substances. Construction, operation, and reclamation of the proposed Donlin Gold Project would involve chemical substances subject to TSCA rules.

1.10.24 THE FEDERAL MINE SAFETY AND HEALTH ACT OF 1977

The Mine Safety and Health Administration (MSHA) administers the provisions of the *Mine Act* (30 CFR 22) to enforce compliance with mandatory safety and health standards as a means to eliminate fatal accidents, to reduce the frequency and severity of nonfatal accidents, to minimize health hazards, and to promote improved safety and health conditions in the nation's mines. Operation of the Donlin Gold Project would require compliance with MSHA standards.

1.10.25 EXECUTIVE MEMORANDUM OF APRIL 29, 1994, ON GOVERNMENT-TO-GOVERNMENT RELATIONS WITH NATIVE AMERICAN TRIBAL GOVERNMENTS, AND EXECUTIVE ORDER 13175 – CONSULTATION AND COORDINATION WITH INDIAN TRIBAL GOVERNMENT

Federal agencies are instructed to operate within a government-to-government relationship with federally recognized tribes; tasked with consulting with potentially affected tribal governments prior to taking actions that affect federally recognized tribal governments; and must also evaluate the impact of federal government plans, projects, programs, and activities on tribal trust resources; and assure that tribal government rights and concerns are considered during the development of such plans, projects, programs, and activities. The Corps, as the lead federal agency for this EIS, is required to consult with federally recognized tribes potentially affected by the Donlin Gold Project.

1.10.26 EXECUTIVE ORDER 11514 – PROTECTION AND ENHANCEMENT OF ENVIRONMENTAL QUALITY

This order requires the EPA to review and evaluate the Draft and Final EIS for compliance with CEQ Guidelines.

1.10.27 EXECUTIVE ORDER 11988 – FLOODPLAIN MANAGEMENT

This order requires federal agencies to establish procedures ensuring that the potential effects of flood hazards and floodplain management are considered for actions undertaken in a floodplain. Impacts to floodplains are to be avoided to the extent practicable. The Donlin Gold Project has potential to impact floodplains.

1.10.28 EXECUTIVE ORDER 11990 – PROTECTION OF WETLANDS

This order requires federal agencies to avoid short- and long-term adverse impacts to wetlands whenever a practicable alternative exists. This EIS analyzes impacts to wetlands.

1.10.29 EXECUTIVE ORDER 12898 – FEDERAL ACTIONS TO ADDRESS ENVIRONMENTAL JUSTICE IN MINORITY POPULATIONS AND LOW-INCOME POPULATIONS

This order instructs federal agencies to develop environmental justice (EJ) strategies to identify and address disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations (including Native American and Alaskan tribes).

1.10.30 EXECUTIVE ORDER 12962 – RECREATIONAL FISHERIES

This order instructs federal agencies to evaluate proposed federal actions for potential effects to aquatic systems and recreational fisheries. The quantity, function, sustainable productivity, and distribution of aquatic resources are to be improved to the extent permitted by law and where practical. This EIS analyzes potential impacts to aquatic systems and recreational fishing opportunities.

1.10.31 EXECUTIVE ORDER 13007 – INDIAN SACRED SITES

This order requires federal agencies to accommodate access to and ceremonial uses of Indian sacred sites located on federal property by Indian religious practitioners and avoid adversely affecting the physical integrity of such sacred sites. This EIS analyzes the potential for impacts to Indian sacred sites.

1.10.32 EXECUTIVE ORDER 13045 – PROTECTION OF CHILDREN FROM ENVIRONMENTAL HEALTH RISKS AND SAFETY RISKS

The order applies to economically significant rules under Executive Order (E.O.) 12866 (Regulatory Planning and Review) that concern an environmental health or safety risk that EPA has reason to believe may disproportionately affect children. This EIS analyzes potential impacts to human health, including children.

1.10.33 EXECUTIVE ORDER 13112 – INVASIVE SPECIES

This order instructs federal agencies to prevent the introduction of invasive species, control those that are introduced, and provide for the restoration of native species.

1.10.34 EXECUTIVE ORDER 13186 – RESPONSIBILITIES OF FEDERAL AGENCIES TO PROTECT MIGRATORY BIRDS

This order requires federal agencies to avoid or minimize the impacts of their actions on migratory birds and take active steps to protect birds and their habitats.

1.10.35 SUMMARY OF PERMITS, APPROVALS, AND CONSULTATIONS REQUIRED

The proposed Donlin Gold Project will require over 100 permits from federal, state, and local governments. For a summary listing of the permits, the issue agencies, and the underlying authorities, see Table 1.10-2.

Table 1.10-2: Permits, Approvals, and Consultations Required

Legal Authority	Agency	Role
Federal		
Federal Laws and Executive Orders Common To Multiple Federal Agencies		
National Environmental Policy Act (NEPA) (42 USC 4321)	NEPA (1969) requires all federal agencies to prepare a detailed statement of the environmental effects of proposed major federal actions that may significantly affect the quality of the human environment.	· Environmental Impact Statement
National Historic Preservation Act (NHPA) of 1966 (16 USC 470).	Prior to the issuance of a federal permit, federal agencies are responsible for taking into account the effect of the undertaking on historical, cultural, and archaeological sites and resources.	· NHPA Consultation, Section 106 Historical and Cultural Resources Protection Act Programmatic Agreement
U.S. Army Corps of Engineers (Corps)		
Clean Water Act (CWA) of 1972 (33 USC 1344)	Discharge of dredged or fill material into waters of the U.S., including wetlands.	· Department of the Army Permit
Rivers and Harbors Act (RHA) of 1899 (33 USC 403)	Work and/or structures in, over, or under navigable waters of the U.S., or which affects the course, location, condition or capacity of such waters.	· Department of the Army Permit
Bureau of Land Management (BLM)		
Federal Land Policy and Management Act (FLPMA) (43 USC 1732), and (43 CFR 2800)	BLM has the authority to grant permits and regulate the use, occupancy, and development of public lands and to take whatever action is required to prevent unnecessary or undue degradation of public lands.	· Land Use Permits (borrow pit activities) · Surface Estate Lease (facilities) · Approval of mining and reclamation plans
Rights of Way, under the Mineral Leasing Act (43 CFR 2880) Mineral Leasing Act of 1920	BLM has the authority to approve a Federal Pipeline Grant of ROW and associated Temporary Use Permits across federal lands.	· Casual and Temporary Use permits associated with the ROW · Material Sales contract

Table 1.10-2: Permits, Approvals, and Consultations Required

Legal Authority	Agency	Role
U.S. Environmental Protection Agency (EPA)		
Clean Air Act (CAA) of 1967, Amended 1977 (42 USC 7401 et seq.)	The EPA conducts a review and evaluation on the environmental impact and adequacy of the Draft and Final EIS as authorized by Section 309 of the CAA. The EPA has oversight responsibilities of state-issued air permits.	· Section 309 evaluation
Clean Water Act of 1972, Amended 1977 (33 USC 1251 et seq.) (40 CFR Parts 110 and 112)	Section 311 – The EPA requires owners/operators to prepare and implement spill prevention, control, and countermeasure (SPCC) plans for facilities that store more than 1,320 gallons in aggregate in above-ground tanks with capacity of 55 gallons or more. Section 402 - The EPA oversees draft APDES permits and can object to proposed permit decisions. Section 404 – The EPA reviews and comments on permit applications for compliance with Section 404(b)(1) Guidelines and other statutes and authorities within their jurisdiction.	· Oversight of SPCC Rule Requirements · Review of APDES permits · Review of Section 404 Permits
Oil Pollution Act (OPA) of 1990 40 CFR Part 112.20	Section 4202 of the Oil Pollution Act amended CWA Section 311(j) by requiring owners or operators of tank vessels, offshore facilities, and certain onshore facilities to prepare and submit FRPs.	· Review of FRPs
Resource Conservation and Recovery Act (RCRA)	Establishes criteria governing the management of hazardous waste. Any hazardous waste generated at a facility associated with the proposed project is subject to the hazardous waste regulations administered by the EPA.	· Permits for the transportation and storage of hazardous waste material
U.S. Coast Guard (USCG)		
Title 33 Navigation and Navigable Waters (33 CFR 160 to 33 CFR 169) Subchapter P, Ports and Waterways Safety	USCG and Department of Homeland Security approve safety features in ports and waterways. USCG approves bridge designs in navigable waters.	· Application for Cargo Transfer Operations · Port Operations Manual Approval · FRPs · Private Aids to Navigation Authorization · Tug and Barge Vessel Inspections · Notice to Mariners · Bridge permits

Table 1.10-2: Permits, Approvals, and Consultations Required

Legal Authority	Agency	Role
U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (USDOT, PHMSA)		
Pipeline Safety Regulations (49 CFR Parts 190-199) Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006 Public Law 109-468 The Pipeline Safety Statute (49 USC 60101-60301)	Pipeline transportation and pipeline facilities must meet the minimum safety standards as regulated and enforced by the USDOT PHMSA. A Special Permit is required for any exceptions to the PHMSA regulations.	· PHMSA approvals
Hazardous Materials Transportation Act (49 USC 1801-1819)	Hazardous materials must be transported according to USDOT regulations.	· Hazardous materials registration
U.S. Federal Aviation Act (14 CFR 61, 91, 119)	Federal Aviation Administration regulates air navigation facilities and air traffic control.	· Notice of Landing Area Proposal (existing airstrip) · Notice of Controlled Firing Area for Blasting · Notice of construction, activation, and deactivation of airports
U.S. Fish and Wildlife Service (FWS)		
Bald and Golden Eagle Protection Act (16 USC 668)	FWS permits relocation of bald and golden eagle nests that interfere with resource development or recovery operations.	· Permits to take, haze, relocate or destroy birds or their nests, for public safety purposes
Marine Mammal Protection Act (MMPA) (16 USC 1361 et seq.)	FWS has regulatory authority for implementing the Marine Mammal Protection Act (MMPA) which prohibits the harassment, hunting, capture, or killing of marine mammals, or the attempt to harass, hunt, capture, or kill marine mammals. Requires Incidental Take Authorizations (ITAs) under Section 101(a)(5)(A) or (D) of the MMPA. ITAs may be issued as either (1) regulations and associated Letters of Authorizations or (2) Incidental Harassment Authorizations. (NOAA also administers the MMPA.)	· Incidental Take Authorization (as necessary); Letters of Authorization or Incidental Harassment Authorizations.
Migratory Bird Treaty Act (MBTA) (16 USC 703)	FWS implements provisions of the Migratory Bird Treaty Act.	· Migratory Bird Treaty Act consultation

Table 1.10-2: Permits, Approvals, and Consultations Required

Legal Authority	Agency	Role
Endangered Species Act of 1973 (ESA) (16 USC 153)1	FWS provides consultation on effects to threatened or endangered species, and to designated critical habitat, and issues incidental take authorizations. Species include terrestrial mammals, plants, birds, Pacific walrus, northern sea otters, and polar bears. (NOAA also administers the ESA.)	· ESA consultation, Corps Issuance of Biological Assessment, FWS issuance of concurrence or Biological Opinion.
National Oceanic and Atmospheric Administration (NOAA) Fisheries		
Magnuson-Stevens Fishery Conservation and Management Act (16 USC 1801-1883)	NOAA Fisheries provides consultation on the effects on EFH. EFH includes habitats necessary to a species for spawning, breeding, feeding, or growth to maturity.	· EFH consultation
Marine Mammal Protection Act (MMPA) (16 USC 1361 et seq.)	NOAA Fisheries has regulatory authority for implementing the MMPA, which prohibits the harassment, hunting, capture, or killing of marine mammals, or the attempt to harass, hunt, capture, or kill marine mammals. Requires ITA under Section 101(a)(5)(A) or (D) of the MMPA. ITAs may be issued as either (1) regulations and associated Letters of Authorizations or (2) Incidental Harassment Authorizations. (FWS also administers the MMPA.)	· Incidental Take Authorization; Letters of Authorizations or Incidental Harassment Authorizations.
Endangered Species Act of 1973 (ESA) (16 USC 153)1	NOAA Fisheries provides consultation on effects to threatened or endangered species, and to designated critical habitat, and issues incidental take authorizations. Species include most marine mammals (see FWS species exceptions), and anadromous fish species. (FWS also administers the ESA.)	· ESA Consultation, Corps Issuance of Biological Assessment, NOAA issuance of concurrence letter or Biological Opinion
U.S. Department of the Treasury		
Treasury Department Order No. 120-1	U.S. Department of the Treasury, Bureau of Alcohol, Tobacco, and Firearms requires that applicants obtain a Permit to Purchase Explosives for Blasting prior to the purchase, storage, and use of explosives for conducting blasting activities.	· License to transport explosives · Permit and license for use of explosives
Federal Communications Commission (FCC)		
Communications Act of 1934 (47 USC 151 et seq.)	FCC regulates interstate and international communications by radio, television, wire, satellite and cable, including radio licensing.	· Radio license
U.S. Department of Homeland Security		
Aviation and Transportation Security Act	Transportation Security Administration oversees security for airports.	· TSA Inspection Program at Airport · Chemical Facility Anti-Terrorism Standards

Table 1.10-2: Permits, Approvals, and Consultations Required

Legal Authority	Agency	Role
State		
Alaska Department of Environmental Conservation (ADEC)		
Clean Air Act of 1967, Amended 1977 (42 USC 7401 et seq.) Air Quality Control (18 AAC 50 et seq.)	ADEC issues Air Quality Control permits to construct and to operate. ADEC issues Title V Operating permits and prevention of significant deterioration (PSD) permits for air pollutant emissions under the CAA Amendments (Title V).	· Air Quality PSD Permit · Title V Operating Permit · Air quality construction permit
Clean Water Act of 1972, Amended 1977 (33 USC 1251 et seq.)	Section 401 requires (for the Corps 404 permit) that ADEC certify that discharges into waters of the U.S. will comply with the CWA, the Alaska Water Quality Standards (18 AAC 70), and other applicable state laws.	· Section 401 Water Quality Certification
Clean Water Act of 1972, Amended 1977 (33 USC 1251) Wastewater Disposal (18 AAC 72) Alaska Pollutant Discharge Elimination System (18 AAC 83) Water Quality Standards (18 AAC 70) Drinking Water Standards (18 AAC 80)	ADEC provides approval for domestic wastewater collection, treatment, and disposal plans for domestic wastewaters. ADEC requires a permit for disposal of domestic and non-domestic wastewater. ADEC is fully authorized to administer the EPA's NPDES program through the APDES overseen by EPA. Existing regulations at 18 AAC 15 and 18 AAC 72 were amended to comply with the CWA. New regulations, 18 AAC 83, were also promulgated in addition to amending the existing regulations. ADEC provides approval for treatment and disposal plans for industrial wastewaters.	· APDES permits · Review Storm Water Discharge Pollution Prevention Plans · Plan reviews of treatment systems · Domestic wastewater disposal permit · Non-domestic wastewater disposal permit
Solid Waste Management (18 AAC Chapter 60) (AS 46.03.100)	ADEC reviews and approves solid waste processing and temporary storage facilities plans for handling and temporary storage of solid waste and landfills.	· Integrated Waste Management Permit/Plan Approval
Food Permit and Registration Requirements (18 AAC 31.020)	ADEC may issue permits for persons seeking to operate a food establishment.	· Food Establishment Permit
Drinking Water System Classification and Plan Approval (18 AAC 80.200)	ADEC may issue approval of public drinking water plans.	· Potable water well logs · Approval to Construct and Operate a Public Water Supply System · Public Water System Identification Number

Table 1.10-2: Permits, Approvals, and Consultations Required

Legal Authority	Agency	Role
Open Burning (18 AAC 50.065)	ADEC enforces air quality requirements for open burning, and requires a permit for controlled open burning of forest land, vegetative cover, fisheries, or wildlife habitat in excess of 40 acres annually.	· Air Quality Permit to Open Burn
Oil and Hazardous Substances Pollution Control Regulations (18 AAC 75) (AS 46.04.040, 050)	ADEC requires production and terminal facilities having an effective above-ground or below-ground storage capacity of greater than 10,000 barrels (420,000 gallons) of refined petroleum products to prepare an Oil Discharge Prevention and Contingency Plan and provide Proof of Financial Responsibility.	· Oil Discharge Prevention and Contingency Plan · Operation of vessels and petroleum product barges on state waters · Oil terminal/storage facility capable of storing 10,000 barrels or more · Above-ground Storage Tank Program (>420,000 gallons)
Alaska Department of Fish and Game (ADF&G)		
The Fish and Wildlife Conservation Act (FWCA) of 1980 (16 USC 2901) The Fish and Wildlife Conservation Act of 1980 (16 USC 661 et seq.)	ADF&G consults with FWS about fish and wildlife resources to conserve or improve wildlife resources. ADF&G provides comments and recommendations to federal agencies pursuant to the FWCA.	· Wildlife consultation · Fish habitat permits
Anadromous Fish Act (AS 16.05.871)	An individual or governmental agency notifies and obtains authorization from ADF&G for activities that could use, divert, obstruct, pollute, or change natural flow of specified anadromous fish streams.	· Fish passage permits
Fishway Act (AS 16.05.841)	The Fishway Act requires that an individual or government agency notify and obtain authorization from the ADF&G for activities within or across a stream used by fish if it is determined that such uses or activities could represent an impediment to the efficient passage of resident or anadromous fish	· Fish passage sufficiency determination
Activities Requiring a Special Area Permit (5 AAC 95.420)	A special area permit must be obtained from ADF&G for activities (except for lawful hunting, trapping, fishing, viewing, and photography) occurring in state game refuges, state recreation areas, across designated wild and scenic rivers, or through state parks.	· Special area permits for designated areas
License, Permit, and Tag Fees; Surcharge; Miscellaneous Permits to Take Fish and Game (AS 16.05.340)	ADF&G may issue a permit to collect fish and game, subject to limitations and provisions that are appropriate, for a scientific, propagative, or educational purpose.	· Permit to collect fish and game

Table 1.10-2: Permits, Approvals, and Consultations Required

Legal Authority	Agency	Role
Permit for Scientific, Educational, Propagative, or Public Safety Purposes (5 AAC 92.033)	ADF&G may issue a permit for the taking, possessing, importing, or exporting of game for scientific, educational, propagative, or public safety purposes.	· Fish collection permits for field studies
Alaska Department of Natural Resources (ADNR)		
Alaska Historic Preservation Act (AS 41.35.010-.240) NHPA of 1966 (16 USC 470 et seq.) (36 CFR 800.106-.110) The Archeological Resources Protection Act of 1979 (16 USC 470)	Section 106 of the NHPA requires consultation with the SHPO and, when there are effects on cultural resources listed on or eligible for inclusion in the National Register of Historic Places (NRHP), with the President's Advisory Council on Historic Preservation. SHPO issues a Field Archaeology Permit for archaeological fieldwork on state lands. The SHPO would also be consulted by the Corps. ADNR Office of History and Archaeology (OHA) issues a Cultural Resources Concurrence for developments that may affect historic or archaeological sites.	· Section 106 Historical and Cultural Resources Protection Act Programmatic Agreement · Archaeology collection permit · Field archaeology permit
Material Sales (AS 38.05.110) Permits (AS 38.05.850) Mining Sites Reclamation Plan Approvals (AS 27.19)	ADNR issues a Material Sales Contract for mining and purchase of gravel from state lands. ADNR issues ROW and Land Use permits for use of state land, ice road construction on state land, and state waters. ADNR approves mining reclamation plans on state, federal, municipal, and private land and water.	· Material Sales Contract · Mining License · Reclamation Plan approval · Land Use Permits and leases · Bonding and Financial Assurance approval
Right-of-Way Leasing Act (AS 38.35.020)	The ADNR State Pipeline Coordinator's Office issues pipeline ROW leases for new pipeline and pipeline related construction and operation across state lands. The ADNR Commissioner signs the leases and the State Pipeline Coordinator manages the leases.	· Rights-of-Way
Water Use (AS 46.15)	ADNR issues a Temporary Water Use Permit for water use necessary for construction and operations. ADNR issues a Water Rights Permit for appropriation of a significant amount of water on other than a temporary basis.	· Temporary Water Use permits · Appropriation of Water Permit/ Certificate to Appropriate Water
Duties and Powers of Department of Natural Resources, Limitations (AS 41.21.020) Section 6(f) of the Land and Water Conservation Fund (LWCF) (16 USC 4601 et seq.)	ADNR has the responsibility for outdoor recreation planning and administering the Land and Water Conservation Fund program within Alaska.	

Table 1.10-2: Permits, Approvals, and Consultations Required

Legal Authority	Agency	Role
Water Management, Article 3 (Dam Safety) (11 AAC 93.150 - 201)	ADNR Dam Safety and Construction Unit issues certificates construct and operate dams in Alaska	· Certificate of Approval to Construct, Modify, Remove or Abandon a Dam · Certificate of Approval to Operate a Dam
Alaska Department of Public Safety (ADPS), Division of Fire and Life Safety		
General function of the Department of Public Safety with respect to fire protection (AS 18.70.010) Alaska Fire and Life Safety Regulations (13 AAC 50-55)	The Division of Fire and Life Safety has statewide jurisdiction for fire code enforcement and plan review authority, except in communities which have received deferrals—including the Municipality of Anchorage, Fairbanks, University of Alaska Fairbanks, and Wasilla/Lakes.	· Approval to transport hazardous materials · Life and Fire Safety Plan checks · Plan Review Certificate of Approval for each building · Fire Marshal permits
2009 International Fire Code (IFC)	All fuel systems being developed to support port and airport operations during pipeline construction and operations must be reviewed and found to conform to the 2009 IFC requirements. Although explosive blasting is not anticipated to be used in the project, if used, the storage magazine type, location, and any barricade requirements must meet IFC requirements.	· 2009 IFC requirements
Alaska Department of Transportation and Public Facilities (ADOT&PF)		
Chapter 25 Operations, Wheeled Vehicles: Oversize and Overweight Vehicles (17 AAC 25.300)	ADOT&PF issues permits for oversize or overweight vehicles.	· Oversize or overweight vehicle permits
Chapter 25 Operations, Wheeled Vehicles: Transportation of Hazardous Materials, Hazardous Substances, or Hazardous Waste (17 AAC 25.200)	ADOT&PF regulates the transportation of hazardous materials, hazardous substances, or hazardous waste by vehicles.	· Compliance with the transportation of hazardous materials, hazardous substances, or hazardous waste regulations.
Utility Permits (17 AAC 15.011)	ADOT&PF issues permits authorizing applicants to construct or install utility facilities within a department ROW.	· Utility permits
Alaska Omnibus Act (P.L. 86-70; 73, Stat. 141)	ADOT&PF manages the lands covered by the Alaska Omnibus Act, including State-Owned FAS Route 231 Crooked Creek to Flat	· ROW relocation

Table 1.10-2: Permits, Approvals, and Consultations Required

Legal Authority	Agency	Role
Alaska Department of Labor, Standards and Safety		
Health Safety and Housing (AS 18.60.180), (8 AAC)	The Alaska Division of Labor Standards and Safety enforces Occupational Safety and Health Administration regulations (OSHA), and assures that project related activities meet standards and regulations for occupational health and safety.	· Certificates of Inspection for Fired and Unfired Pressure Vessels · Occupational Safety and Health (inspections and certificates) · Employer Identification Number
Alaska Department of Health and Social Services		
Alaska Best Management Practices, Alaska Health Impact Assessment (HIA) Program	The HIA Program evaluates the potential human health effects of new policies, programs, or development projects in Alaska through the use of existing public health surveillance data, medical literature reviews, and field studies.	· Health Impact Assessment (HIA)
Alaska Department of Military Affairs		
Emergency Planning Districts and Committees, Plan Review (AS 26.23.073, .077)	Planning and reporting requirements for facilities that handle, store, and/or manufacture hazardous materials.	· Hazardous chemical inventories
Alaska Division of Homeland Security & Emergency Management (DHS&EM)		
Hazardous Chemicals, Materials, and Wastes (AS 29.35.500)	The State Emergency Response Commission (SERC) enforces reporting and planning requirements for facilities that handle, store, and/or manufacture hazardous materials.	
Local		
Matanuska-Susitna (Mat-Su) Borough		
Mat-Su Borough Title 17 Zoning (17.01-17.125)	The Mat-Su Borough requires compliance with its zoning code. All land development in the Borough is subject to MSB Title 17.02, Mandatory Land Use Permit.	· Zoning · Plan review and construction permits · Solid waste

Table 1.10-2: Permits, Approvals, and Consultations Required

Legal Authority	Agency	Role
Kenai Peninsula Borough (KPB)		
Kenai Peninsula Borough Title 17 (17.10.185, 17.08-50)	The KPB Land Management Division requires compliance with its code for utility or pipeline easements.	· Easements for utilities, pipelines, barge landings and travel ways

Abbreviations:

AAC = Alaska Administrative Code
APDES = Alaska Pollutant Discharge Elimination System
AS = Alaska Statute
CEA = Chugach Electric Association, Inc.
CFR = Code of Federal Regulations
FRP = Facility Response Plan
GCI = General Communications Network, Inc.
HIA = Health Impact Assessment
MSB = Matanuska-Susitna Borough
NPDES = National Pollutant Discharge Elimination System
NRHP = National Register of Historic Places
OHA = Office of History and Archaeology
PSD = prevention of significant deterioration
ROW = right-of-way
SERC = State Emergency Response Commission
SHPO = State Historic Preservation Office
SPCC = spill prevention, control, and countermeasure
TSA = Transportation Security Administration
USC = United States Code